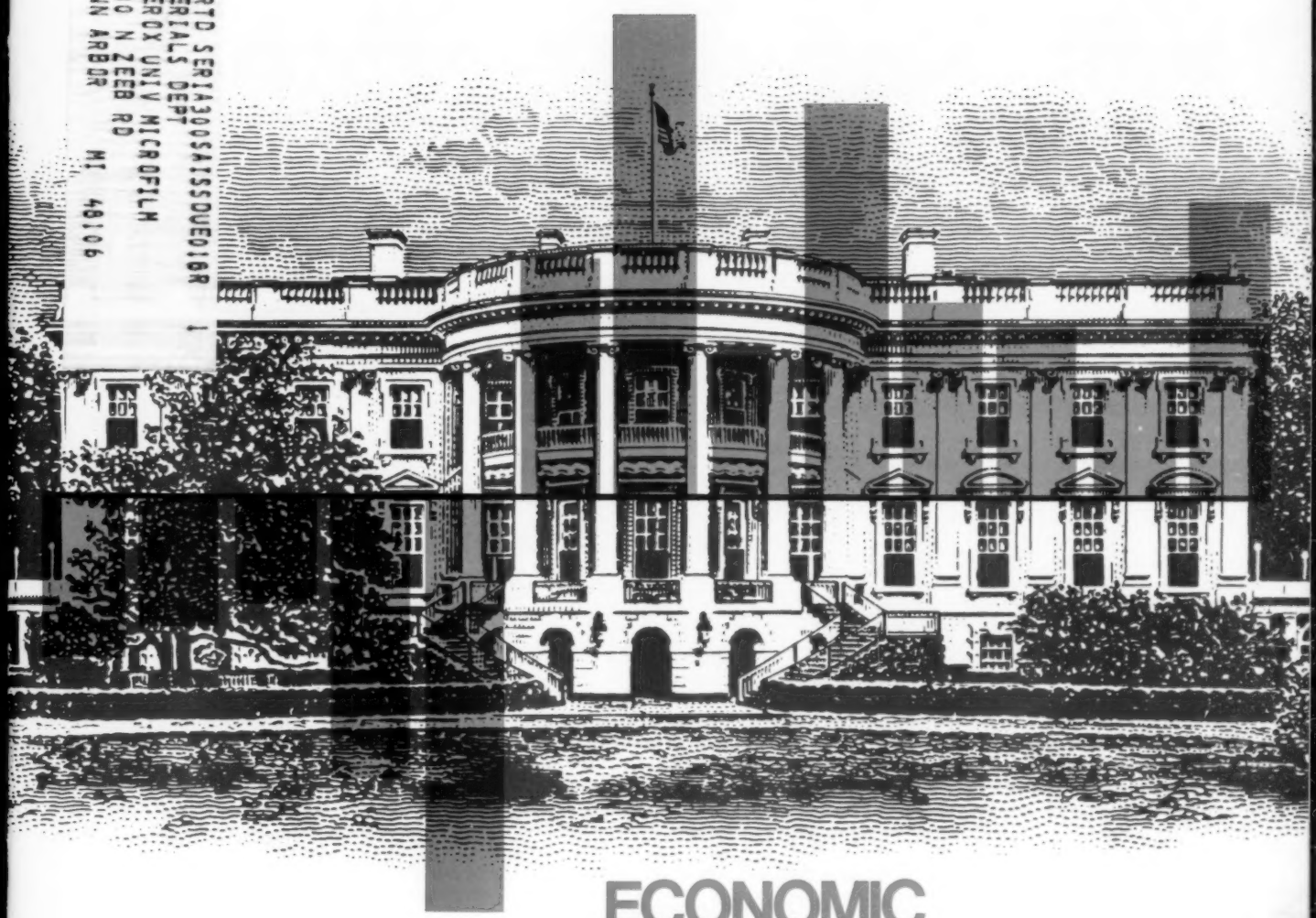
COMMERCE AMERICA

U.S. Department of Commerce / July 18, 1977

CRTD SERIA300SAISSDUE01BR 1
SERIALS DEPT
XEROX UNIV MICROFILM
300 N ZEEB RD
ANN ARBOR MI 48106



ECONOMIC POLICY: The Flexibility Factor

Newsmemo

The MBA degree opens the doors, but dedication and hard work win the promotions. And in today's keen competitive atmosphere, favoritism to the senior employee or the "nice guy" is being increasingly rejected by business, according to president James Corrigan of RJR Foods, Inc. He defines the current standard: "Companies want people who produce and get the job done. They need people who apply themselves and are committed to getting results." In his mind that standard also explains current efforts to increase minority openings: "We feel minorities are a group of individuals who offer the greatest untapped potential for executive talent within the business world."

Firm positions in defense of industrial property rights are advocated in a new study on the transfer of technology to the developing nations. A task force of the Chamber of Commerce of the U.S. stresses that the essential ingredient for successful technology transfer is voluntary participation by both transferors and transferees on a continuing basis. It warns of legislative trends in some developing nations and efforts in UN bodies that could threaten this process. The 49-page report, aimed at assisting discussion among both business and governmental leaders, is available for $5 from the Chamber at 1615 H St., NW., Washington, D.C. 20062, under the title "Technology Transfer and the Developing Countries," Publication #55.

The publicized rush of U.S. corporate headquarters into the Sunbelt may be more apparent than real. This is the conclusion to a survey by the editors of Conway Publications' "Site Selection Handbook." Based on data supplied by area development agencies about $1 million-plus companies, the survey showed that of 95 verified relocations, 41 were within a region--for example, from one part of the U.S. Northeast to another. Of these, 25 were from urban to rural sites, continuing a trend that has been noted for several years. Corporate headquarters moving from the Northeast to the Sunbelt numbered 20. The Conway editors characterize this as a "significant trickle," but not a stampede.

Every crisis or every irritation is a market, and a good example is the wide-open field for women as appliance repairers doing house calls. Albert Shapero, a U. of Texas management professor specializing in entrepreneurship, points out the advantages. Repairwomen with good training and good equipment would have a special appeal, he believes, to women alone in their homes who may feel uncomfortable with strange men moving about there. Also, some servicemen just don't want to take women seriously, and often insist on getting their information about complaints from the "man of the house." So, concludes Shapero, "Why not have women trade on their classical image--of not being a threatening presence--to profit in an area of personal service?"

Rural housing in the U.S. is generally newer than urban by about five years. This statistical summary, which appears to confound the popular image of weatherbeaten farmhouses, actually reflects the continued migration of Americans to the outer fringes of the suburbs and to the countryside. Median age of rural housing in 1975, when the Census-HUD survey was taken, was 19 years, compared to 24 years for urban units. A significant figure in this comparison is the average age of rural homes inside metro areas, only 14 years. The current decade has witnessed heavy growth in suburban-fringe rural homes.

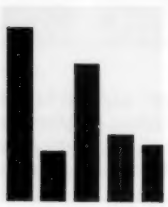
The terms gold and silver may have different meanings in the days ahead. The Federal Trade Commission is studying proposed amendments to its jewelry industry guides that would expand the definitions. Presently, only gold articles of 10 or more karats can be marked as gold. The new rule would expand the mark if accompanied by a tag identifying metal composition and stating: "Gold alloys of less than 10 karats can be expected to tarnish and corrode." Similarly, the term silver now applies only to metal that is .925 or more of pure silver. The revised guide would permit the use of the term on articles of lesser content if the proportion were explicitly designated, such as ".500 silver."

EDITOR'S NOTE: See back cover for important information on reduced subscription price and energy savings derived from our use of uncoated paper stock.

COMMERCE AMERICA

CONTENTS

Vol. II, No. 15, July 18, 1977



2

Confusion Or Consistency In U.S. Economic Policy?

Commerce's chief economist examines critics' charges about the Administration's economic strategy.

5

American Tourism Seen Major Industry By Year 2000

A U.S. Travel Service official predicts tourism here will grow more rapidly than the economy as a whole over the next 25 years.

8 **Energy Digest**

9 **Domestic Business Report**

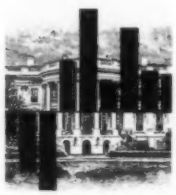
Simulator helps captains avoid tanker collisions—Study urges U.S. to equip merchant fleet for heavy-lift cargoes—Drought assistance funds go to seven states—U.S. travelers spent record amounts abroad last year—Aquaculture seen as part of solution to possible seafood shortage—Key Business Indicators—Contractor needed to test solar collectors—Shippers, carriers meet to resolve deck space problem—Fleet of seagoing "blotters" may sop up future oil spills—Trial voluntary product labeling program begins—Calendar of Business Events.

12 **Key Business Indicators**

A new feature is introduced in this issue for readers' use.

17 **International Commerce Report**

Mining equipment trade mission reports on markets in Greece, Turkey—Summary of month's actions affecting trade—Exhibitions at U.S. Centers in Stockholm, Mexico City, Singapore—Economic trends in Venezuela, Nicaragua, Jamaica, Honduras, Madagascar, the Central African Empire and Ethiopia—Calendar of upcoming events—New international business publications—Licensing, investment, trade, construction opportunities around the world.



COVER: The flexibility factor is an important consideration in judging the Administration's economic policy, Courtenay Slater, Commerce chief economist, explains in an article beginning on page 2.

U.S. DEPARTMENT OF COMMERCE

JUANITA M. KREPS
Secretary

SIDNEY HARMAN
Under Secretary

ERNEST A. LOTITO
Director of Communications

RICHARD BALENTINE
Editor

CLARENCE M. ZENS
Associate Editor, International Commerce

ARTHUR McDERMOTT
Associate Editor, Domestic Business

Charles Messina, Jr.
Graphics Coordinator

Staff Writers:
Douglas F. Carroll, Felix Cotten, Margaret L. Hanson, Leslie Wilder.

Published biweekly by the U.S. Department of Commerce, Washington, D.C. Annual subscription rate $22 ($6 addition for foreign mailing). Single copy domestic, 90 cents. Single copy for foreign mailing, $1.20. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce District Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.

Microfiche copy available at $2.25 per issue from National Technical Information Service, Springfield, Virginia 22151. Other inquiries should be sent to the U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, D.C. 20230.

Controlled circulation postage paid at Merrifield, Va. Application to mail at controlled circulation rates is pending at Merrifield, Va.

Contents of this publication are not copyrighted unless indicated, and if not so indicated, the articles may be reproduced in part or in full without any prior consent. The Secretary of Commerce has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through August 31, 1981.

Confusion or Consistency in U.S. ECONOMIC POLICY?

Dr. Slater

This article is excerpted from a recent address before The Quarterly Business Forecast Update Conference at the University of California in Los Angeles by Commerce's Chief Economist Courtenay M. Slater.

One frequently reads and hears charges of confusion and inconsistency in economic policy. For example, a recent newspaper column stated:

> "The culprit is a government lacking a coherent economic strategy, taking back with the left hand what the right has given."

And a participant in a recent Business Council meeting at Hot Springs was quoted as saying:

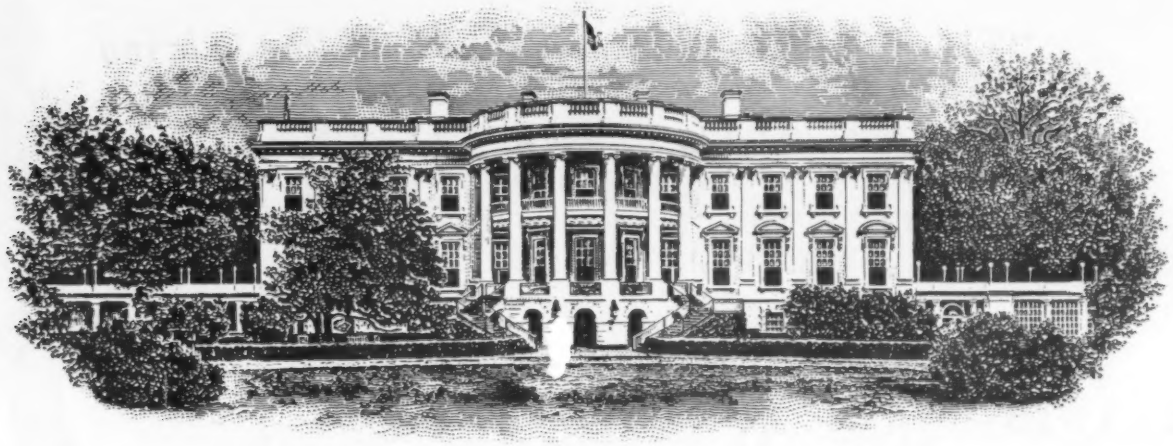
> "The Administration's on-again, off-again policies bother me. . . . We're worried. We don't know what's going to happen next."

Since these charges have been made, they should be examined. Among the apparent confusions, contradictions, inconsistencies, or reversals on which critics have focused are the following:

- A sharply changed assessment of the strength of the economy, leading to a surprise decision to withdraw the proposed tax rebate;
- Promises of a very strong anti-inflation policy, followed by a backing away from any form of structured incomes policy or guideposts;
- An energy policy and a social security tax proposal which unquestionably will place upward pressure on price levels, thereby conflicting with the goals of anti-inflation policy.

The list could be longer but these three examples will serve to illustrate some points regarding the elements which must enter into a satisfactory economic policy.

One element is flexibility. Not everyone agrees with this. Some argue for "steady as you go," no matter what. I disagree. So long as we have a Federal Government and that government has a budget, the budget will have an impact on the economy. That impact must be monitored and, to the extent practical, adjusted to meet policy objectives. When the consumer sector began to perform more strongly



than had been predicted, it was appropriate to re-examine short-run tax policy and make adjustments.

Decisions such as these are never easy, because forecasts are never perfect. Debate continues as to whether the rebate was or was not needed. I am not trying to win converts to one view or the other. But I am trying to stress that changes in short-run economic policy are an appropriate response to changes in economic circumstances. They do not necessarily indicate confusion or a shift in basic objectives.

Further fiscal policy shifts at some point may be required as part of what must be a continuing effort to hold the economy firmly on a path of strong and steady growth. For example, the question often is put to Administration officials whether some tax reduction will be required in conjunction with the tax reform proposals soon to be submitted. I do not know what the answer to that question will—or should—be. I do know that the question must be examined, and the decision made, in the context of doing what is necessary to sustain economic growth.

The tax rebate proposed last winter was only one element in the stimulative package proposed by President Carter, and it was the most transitory element. The other components—the enlarged standard deduction, public service employment, countercyclical aid to state and local government, local public works—are still there and will be contributing to the strong economic growth which we seek to achieve.

These job creation programs are ambitious. Much effort has gone into improving their design and preparing for their rapid expansion. I offer this as a reminder that a successful economic policy requires a lot of hard work behind the scenes by a lot of competent people.

Returning to the charges of confusion, let's take a look at anti-inflation policy. This illustrates another necessity of satisfactory economic policy: realism. President Carter rejected the idea of wage and price controls from the beginning. That is one decision which has been firm and consistent and remains so.

However, there was discussion and examination of the possible merits of voluntary guidelines or other systematic persuasive efforts. A realistic assessment of all elements in the wage-price picture, including the prevalent attitudes of business and labor leaders —attitudes growing out of the history of wage-price policy during the first half of this decade—led to the conclusion that cooperation in reducing inflation is more likely to be achieved through quiet discussion than through specific guidelines or public "jawboning."

Realism has governed anti-inflation policy in other ways as well. It has been recognized that efforts to contain inflation cannot be confined to wage-price policy and budgetary discipline—important though these may be. Another fundamental component must be an examination of the myriad ways in which the government itself contributes to inflation. Trade policy, regulatory policy, farm price supports, minimum wage legislation must all be examined for their impacts on prices. This is not simple, nor glamorous. It can be most unpleasant politically. Measurable results will emerge only over a considerable period of time.

"... efforts to contain inflation cannot be confined to wage-price policy and budgetary discipline—important though these may be."

In a way, the criticism of anti-inflation policy has been almost the opposite of the criticism of the tax rebate episode. Patience and perseverance are needed in dealing with inflation. Dramatic results are not possible and have not been promised. Those who are troubled by a display of flexibility in fiscal policy should at least take comfort in the Administration's determination to pursue a sustained effort to reduce inflation.

This brings me to the third point I would like to make about confusion in economic policy: There is no such thing as a free lunch. Often, what appear to be inconsistencies are in fact difficult trade-offs among competing objectives. Energy policy will have some inflationary consequences. Increased social security payroll taxes on employers will have some inflationary consequences.

International tourism will become a more important part of the world economy as tourism grows more rapidly than other sectors of the economy. As a result, a larger portion of jobs and income will derive directly from international tourism, and the impact on the balance of payments will be greater.

The Administration is not unaware of these unpleasant trade-offs, but the magic way to avoid them

"The inflation rate, which we would like to bring down to the 4 percent range currently seems determined to hang in there at 6. This year's record trade deficit, so useful for the world economy, creates serious difficulties for some domestic industries."

has not yet been found. I don't think we'd turn down a free lunch if we could find one. Anyone who knows of a financially sound, politically acceptable, totally non-inflationary way of financing social security should not be shy about stepping forward.

Having done what I can to shed light on the apparent confusions of economic policy, let me undertake a brief search for coherence and consistency. Suppose I were an outside observer of the policy scene, asking myself what the medium-term objectives of economic policy ought to be, and how they ought to be achieved. I think I might identify the following objectives:

- Steady reduction in unemployment, to something under 5 percent in the medium-term and ultimately something a good deal less than that;
- Containment of inflation at its present underlying rate of 6 percent, followed, over time, by gradual but enduring reductions in that rate;
- A more even distribution of economic growth and employment opportunity among regions of the country and among demographic groups;
- A federal budget which moves toward balance as unemployment is reduced, thereby retaining its utility as an economic balance wheel;
- A U.S. economy open to international trade and investment, so that growth in the United States will contribute to a healthier world economy.

"... the goals I have advocated and the policies I have suggested are not just random musings ..."

Obviously, I am limiting myself here to macroeconomic objectives. Like anyone else, I have views on social and environmental questions, but this is not the place to air them. So, what ought to be done to achieve the listed macroeconomic objectives? The policy needs are numerous, but the most basic would include:

- A coordinated fiscal and monetary policy designed to support strong and sustained economic growth; that is, real GNP growth of 6 percent or so right now, tapering to 4 percent or so at the end of this decade;
- An employment and training policy designed to increase the employability of those who, for so many reasons, presently are unable to compete successfully in the labor market;
- An anti-inflation policy which attacks the structural as well as the aggregate causes of inflation;
- A new emphasis on regional approaches to economic growth and a careful targeting of assistance where it is most needed;
- A budget strategy which takes into account the future as well as current impact of tax and spending decisions;
- A trade policy which resists pressure for import restrictions.

Now, obviously, the goals I have advocated and the policies I have suggested are not just random musings, but are in essence the objectives being sought and the policies being utilized by the Carter Administration. I submit that they do represent a coherent and well-integrated economic strategy.

The question is not: Do we have a consistent set of medium-term economic policies and objectives? We do. The question is: Can these objectives be achieved? They are not only consistent and coherent, they are highly ambitious.

Only once in recent peacetime history has the economy grown steadily over a sustained period at rates comparable to those sought during the next four years. Given current assumptions about other sectors of the economy, achieving the growth pattern projected for the next four years will require an annual growth of real business fixed investment of 9 to 10 percent.

Suppose this does not materialize? Will other sectors expand to take up the slack? Or will new fiscal stimulus be required? If so, what will this do to the delicately balanced projections which now show a small surplus in the federal budget by 1981?

These are not the only questions. The inflation rate, which we would like to bring down to the 4 percent range, currently seems determined to hang in there at 6. This year's record U.S. trade deficit, so useful for the world economy, creates serious difficulties for some domestic industries.

I do not mean to imply that our medium-term economic goals will not be achieved. They are ambitious, but not unattainable. I certainly would not advocate that we strive for less. What I would hope for is a widespread understanding that there is a coherent economic strategy, that it has been carefully thought through, that the foreseeable difficulties along the way have been recognized, and that there is great determination to stick to it.

U.S. TOURISM
Seen Major Industry by 2000

This article was adapted from a paper presented by David L. Edgell, Director, Office of Policy Analysis of the United States Travel Service, as part of The Key Issue Lecture Series at the University of Texas at Dallas.

Prognosticator Herman Kahn, in his recent book *The Next 200 Years—A Scenario For America and The World,* has looked at the next 25 years of tourism. He predicts that by the year 2000, "tourism will be one of the largest industries in the world, if not the largest" and that it should "continue its current tendency to increase by 10 to 20 percent a year" until that time.

The United States Travel Service (USTS), the Commerce agency charged with promoting and facilitating international tourism to the United States, predicts that the tourism sector of the economy will grow more rapidly than the U.S. economy as a whole, and tourism will become of increasing importance in the international sector of the U.S. economy over the next 25 years. In real terms, tourism expenditures by foreign travelers in the United States have grown from $1.0 billion in 1960 to over $6.7 billion in 1976, a growth rate of about 12.7 percent That is faster than the GNP growth rate during the same period.

Economist Anthony Edwards has forecast that globally, the growth rate of travel is likely to be considerably faster from 1974 to 1980 than was true from 1966 to 1974. He suggests that the growth rate for the period 1980 to 1985 will taper off, but still remain a little higher than was true for 1966 to 1974.

By any measure, international tourism is both a major industry and a growth industry. Last year, world receipts from international tourism reached about $40 billion. That figure represents an increase of 18 percent over 1975. The U.S. share of that $40 billion amounted to nearly $7 billion—over 20 percent greater than in 1975.

If USTS predictions are borne out, foreign visitor arrivals in the year 2000 should be over 40 million and foreign tourism receipts should approach $20 billion, in 1976 dollars.

International tourism has a direct and substantial

GETTING READY FOR 1980—Lake Placid, N.Y., has received money to update its facilities, such as the start house for the Biathlon, for the 1980 Winter Olympics.

impact on the U.S. balance of payments. Historically, Americans traveling abroad have spent more than foreign visitors touring in the United States. This has produced a deficit in the travel portion of the nation's current account balance.

In recent years, this deficit—some call it the "travel gap"—has begun to shrink. In 1976, it was 14 percent less than in 1975, but still a substantial $2.65 billion. If inbound tourism were to grow at the current rate, the deficit would disappear before the end of the century.

United States Travel Service forecasts of increased tourism are based on several assumptions. One of these is that in the year 2000 the real income per person throughout the world will be much higher than it is today. As a result there will be a much larger amount of discretionary income available for activities such as pleasure travel.

"As the world prospers, tourism will become a more important factor of U.S. economic and foreign policy."

This discretionary income will be more widely distributed than it is today. Therefore, a larger proportion of the world's population will travel than travels today. International tourists will include more individuals from the lower end of the income spectrum—as well as those from the upper end who form the bulk of today's travelers.

Among the other assumptions upon which USTS based its predictions:

- A relatively "steady state" growth in the economies of the United States and of those nations of the world which are the major sources of visitors to the United States;
- Moderate rates of increase in real income growth and in price levels in the United States;
- A moderate growth in the U.S. GNP;
- Inflation below the high rates of the mid-1970s;
- No major natural disasters or other catastrophic events, including another major energy crisis; and
- No increase in international impediments to travel.

Still another assumption was that aircraft technology and price reduction policies will outstrip increases in the cost of jet fuel. If this occurs, the relative cost of tourism will decline over the next 25 years, particularly in the area of transportation.

The growth sector of the air travel market is tourism which is sensitive to price and insensitive to time. Lower air fares will encourage greater air travel. New and cheaper forms of transportation are already beginning to appear, and even cheaper and more informal methods are expected in the future.

The most important implication of the USTS forecasts is the need for planning. Americans will have to worry about absorptive capacity with respect to tourism. This is the ability of an area to supply enough tourist infrastructure and facilities to handle the demand of tourists. Such planning will be necessary to ease crowding and prevent damage to the natural environment.

There can be limitations because of labor shortages, capital shortages, land shortages or many other causes. These shortages can be due to natural resources which the local population finds preferable to tourism. Resistance to using resources to increase tourism absorptive capacity could become particularly important if local opposition to tourism increases because of environmental concerns.

With proper planning, reserves can be set aside, in the form of National Parks, Seashores and Forests, both to protect finite scenic resources from overuse or exploitation and to increase travel opportunities for tourists.

In addition, tourism, given its proper consideration in national priorities, can aid in maintaining our historical and cultural heritage, preserving and restoring traditions, while at the same time adding to the quality of life of those who wish to enjoy the benefits of such important social aspects of this great country.

Tourism will occur with or without planning; it is an essential part of life in today's world. Many people seek their release from tensions and strains of modern living by looking to travel and tourism. People want a change of pace, an opportunity to experience life in new and different places.

And, as the world prospers, this aspect of modern life, travel and tourism, will become a more important factor of U.S. economic and foreign policy—and it will have a major impact on environmental policy and land-use and other social values which add to the quality of life of society. Tourism is simply too important an industry to permit it to develop without planning and policy direction.

The European nations have recognized the essentiality of tourism to their economies and have planned its development and launched its programs with the same vigor the United States applied in putting a man on the moon. In the meantime, very little coordinated short-range or long-range tourism planning has taken place in the United States.

For example, the United States Travel Service was established in 1961. Prior to that date there was no coordinated U.S. national tourism policy regarding international tourism. Compared to other nations, the United States has been a latecomer to tourism public policy. It is only now starting to catch up.

Currently, the U.S. Senate is conducting a major study of Federal Government policy toward tourism. This study has as an objective the development of a national tourism policy which "should be a prescription for assuring that the federal tourism effort effectively responds to the national interests in tourism and, where appropriate, meets the needs of state and local governments and the private sector of industry."

The United States has not been totally without tourism-related projects supported by the public sector. Commerce's Economic Development Administration (EDA) has obligated more than $100 million since 1972 to projects designed to encourage

both domestic and foreign tourism. These include recreation centers, parks, playgrounds, campgrounds, marinas and skiing facilities.

The conservation society in San Antonio has received a grant to renovate an historic area; a Marietta, Ohio, organization received a grant for renovation of a showboat; a Colorado group has received funds to restore a scenic railroad.

In the past decade, more than 60 EDA grants have gone to Indian tribes for construction of various recreation and cultural facilities.

An EDA grant of $30.2 million was awarded in March to Lake Placid, N.Y., to help provide facilities for the 1980 Winter Olympic Games and to create jobs for construction workers. The 1932 Winter Olympics were held there, and in some cases, the money will be used to renovate and repair existing facilities.

Lake Placid 1980 Olympic Games, Inc., the nonprofit organization conducting the event, hopes that the improvements will enable Lake Placid to serve as a training ground for future participants in Olympic competition, thus providing some long-term economic growth in the Essex County area of New York.

The facilities are to be located at or near the Village of Lake Placid in the New York Adirondack State Park. The work will include:

—Renovation of the Lake Placid Arena and construction of a new field house on an adjoining site in Lake Placid. The project will include development of four ice sheets with a combined seating capacity for 10,000 spectators. The complex will be used as the site for figure skating, ice dancing, hockey, and award and closing ceremonies during the games.

—Reconstruction of the existing 400-meter speed skating oval at the Lake Placid High School as a refrigerated, lighted track. The project will provide seating for an estimated 7,000 spectators.

—Construction of a new 90-meter ski jump and reconstruction of an existing 70-meter jump to converge in a common run at the base of the hill at Intervale, just south of Lake Placid. Spectator capacity at the site has been placed at 15,000.

—Development of a 1000-meter refrigerated luge (sled) run, generally parallel to the existing bobsled run at the Mt. Van Hoevenberg Recreation Area, just south of Lake Placid. Spectator areas will be located at the start of the run, the "hairpin curve," the "Omega curve," and at the finish line.

As many as 500 full-time jobs may be created during the games. Local officials anticipate that new year-round employment will be developed to serve tourists and athletes using the improved recreation facilities and by conventions that will be attracted to the area by the enlarged conference and exhibit space.

Tourism is a major employer as well as a major sector of the economy. Like other sectors in the service industry, it is labor intensive. Last year, foreign visitor spending alone created or supported more than 300,000 U.S. jobs with payrolls of about $2 billion. International and domestic tourism together rank as one of the three largest employers in more than 30 of the United States.

In terms of composition, tourism is vast and diverse. It is made up of several separate components and thousands of independent companies. In 1973, the National Tourism Resources Review Commission estimated that more than 770,000 enterprises in the United States are involved in some phase of tourism; 98 percent were classified as small businesses. Included among these firms were restaurants; hotels, motels and resorts; amusement parks; souvenir and gift stands and other retail establishments.

THE COWBOYS ARE INDIANS—Indian tribes have been recipients of Commerce grants to develop recreation facilities, such as the Sunrise Resort in McNary, Ariz., belonging to the White Mountain Apache Tribe.

International tourism will become a more important part of the world economy as tourism grows more rapidly than other sectors of the economy. As a result, a larger portion of jobs and incomes will derive directly from international tourism, and the impact on the balance of payments will be greater.

For the United States, this would mean that a growing proportion of U.S. export earnings would come from selling tourism services to foreign tourists in the United States rather than from exporting merchandise. Also, selected state and local economies would be heavily supported by international tourism.

Tourism can be an instrument of foreign policy as well as a commercial activity.

USTS foresees increased contacts between persons of different cultures leading to increased knowledge and understanding, which in turn can contribute to a relaxation of tensions between nations. World leaders recognize this. For example, one of the first steps President Carter proposed to normalize relations with Cuba was to lift the ban on American travel to that country. A similar policy was followed in 1972 when relations were resumed with the People's Republic of China.

"A growing proportion of U.S. export earnings will come from selling tourism services to foreign tourists in the United States."

The most well-known example of the diplomatic aspects of tourism appears in the final act of the Conference on Security and Cooperation in Europe, commonly known as the Helsinki Accord, which was signed by 35 nations including the United States. In addition to being a signatory of the Helsinki Accord, the United States is a party to bilateral agreements which call for the promotion of people-to-people contacts and tourism. Agreements with the Soviet Union, Romania and Egypt are currently in effect.

The role of international politics will have a great impact on the international tourism sector. Impediments to travel such as control of visas, passports, and foreign exchange will have the ability to stymie travel. Alternatively, elimination or amelioration of these impediments will have the power to facilitate tourism, and more nations are likely to have bilateral trade negotiations which include agreements to mutually reduce the impediments to travel.

Energy Digest

BUYING SMALL . . . The Energy Research and Development Administration (ERDA) plans to buy a minimum of ten improved electric and/or "hybrid" vehicles--two each from five or more small companies. A Request For Proposals (RFP) asks firms qualifying as small businesses to submit by July 5 proposals to build the new vehicles, which would be used for testing and evaluation. The project is aimed at getting firms which are capable of or already involved in building electric or hybrid vehicles to address and resolve specific problems, including performance, safety and reliability. Each contractor will be required to deliver two vehicles for acceptance tests within eight months from the date of contract award. The vehicles may be cars, small vans, or pickup trucks. Awards will be limited to $100,000 for any single contractor and the total procurement will not exceed $500,000.

HARNESSING THE WAVES . . . A civil engineering professor has "harnessed" the sea's energy inside his laboratory in Israel. Prof. Anthony Peranio claims to have come up with a practical way for using the sea to run factories and heat homes. His small working model of a sea wave conversion device features a long inclined ramp leading to an elevated water tank. As waves rush up the ramp and into the tank, most of their kinetic energy is converted to potential energy, in the form of the increased height of the water in the tank. Energy is then extracted from the controlled flow of this water through a conventional turbine. Peranio says that large-scale wave converters extending as much as two-thirds of a mile into the water could also serve as breakwaters.

GEARING DOWN ENERGY USE . . . An oil burner system that is claimed to allow oil savings of up to 22 percent has won the gold cup award for energy savings at the International Inventors Exposition in New York's Albert Hall. Its producers, B. Palm & Co. of Norkoping, Sweden, describe it as a built-in gear box in which the dynamic pressure of combustion air is reduced by a ratio of 8:1 while maintaining a high static pressure. The effect is a very efficient mixing of combustion air with a cone of atomised oil, resulting in lower fuel consumption. As well as the fuel savings, its makers say the system has a zero smoke or soot rating and a carbon dioxide reading of not more than 13 percent.

SUN POWER . . . Scientists have moved a step closer to harnessing fusion energy--the process that powers the sun--for the generation of electricity on earth, ERDA has announced. A two-fold improvement in the ability to contain the extremely hot fusion fuel, called plasma, has been achieved in the Massachusetts Institute of Technology's experimental fusion device. There are three requirements for practical fusion energy: plasma density, confinement time and higher temperatures. The MIT device has produced improvements in the first two. According to ERDA, these developments, coupled with recent engineering progress, provide strong encouragement that electricity could be produced experimentally by fusion in the 1980s.

AIRBORNE WASTE DETECTIVE . . . Building owners throughout Minnesota can view special aerial pictures of their homes, schools, stores and factories to find out whether poor insulation is wasting energy and costing them money. Between November and mid-March an aircraft took infrared pictures of 25 Minnesota cities at night. The pictures are being made available to the public. Trained community representatives are working directly with their fellow citizens, pointing out potential insulation problems and answering general questions on conservation. The project team also plans to produce a manual that will give details of the program to other states and localities considering a similar project.

EYES OF TEXAS ON ENERGY . . . The University of Texas has formed a Council on Energy Resources to promote and coordinate research by its component units on energy resources and issues "that are critical to the State of Texas and to the nation." The council will act as an umbrella to assist in communication and coordination among the University's various centers and individuals, will work to identify important areas on which research is needed, and help to establish support for such research.

Simulator Helps Captains Avoid Tanker Collisions

MARITIME ADMINISTRATION FACILITY HAS BEGUN TRAINING SHIP OPERATORS FOR ALASKAN OIL TRANSFER

Ships' captains who will be commanding tankers carrying oil from Valdez, Alaska, to the lower 48 states can now experience all types of emergencies and learn how to deal with them without leaving dry land, thanks to a new simulator operated by Commerce's Maritime Administration.

The ship operations research simulator is located at the National Maritime Research Center at Kings Point, N.Y. Training for the ship operators will consist of a five-day program of orientation, trial runs and debriefings at the Maritime Administration's Computer-Aided Operations Research Facility (CAORF). During each program, six to eight captains, pilots and/or first mates will make approximately 50 simulated, inbound and outbound passages through the Valdez Narrows from Bly Island to Valdez Harbor on ships of 80,000 and 160,000 deadweight tons. Wind, traffic and visibility conditions will vary, and the officers will be subjected to abnormal operating situations such as power and steering failures.

Shipping companies interested in enrolling their employees in the Valdez training program should contact Stanley D. Wheatley, Director, National Maritime Research Center, Kings Point, N.Y. 11024 (telephone 516-482-8200).

CAORF realistically simulates vessel operations in open seas, channels and harbors, including traffic encounters, through the use of a full-scale, bridge mock-up fitted with control and navigation equipment identical to that found on a modern merchant ship.

On a 125-foot cylindrical screen in front of the bridge a constantly changing, computer-generated image of the simulated voyage environment is projected in full color. A variety of navigational situations, including full to zero visibility, topographical features and other ships, can be provided. Sound, radar and ship-handling characteristics add to the realism.

Since CAORF opened a year ago, its staff has been conducting research in a number of areas: ship control and navigation; proposed changes in International Rules of the Road; the design and use of computerized, collision threat-assessment systems and ships' bridge systems; and harbor design.

A two-day symposium was held recently at the Research Center to introduce some 100 representatives of the maritime industry to the simulator, which the Maritime Administration claims is the world's most advanced. The symposium was scheduled to inform the industry of CAORF's capabilities as a tool for improving the safety and efficiency of ship operations, for testing new marine equipment, and for analyzing harbor designs.

Already, members of the Southwest Alaska Pilots Association—the men who will control the ships as they pass through the Valdez Narrows—have completed more than 180 simulated voyages. CAORF simulated various equipment failures and environmental conditions as a part of the training exercise. The final report hasn't been completed, but CAORF officials expressed the belief that the experiments will make a substantial contribution to the safety of shipping operations at Valdez.

Earlier CAORF experiments compared the behavior of ships' mates both at the facility and aboard actual vessels. Results indicate that the behavior is similar and therefore that CAORF research will have valid applications in actual ship operations.

New York Sandy Hook Pilots Association members who have participated in CAORF experiments also have attested to the realism of the facility's visual scene and its ship-handling characteristics.

CAORF has been used to compare the relative merits of visual sighting, conventional radar, and computerized collision-avoidance systems (CAS). The results clearly indicate that the CAS system is the superior method of navigating, especially in heavy traffic. In addition the facility has tested a device being developed at the Na-

BETTER THAN THE REAL THING—*Control Center of the Maritime Administration's Computer-Aided Operations Research Facility enables ship operators to experience simulated but realistic emergencies and take corrective action.*

tional Maritime Research Center to enhance the collision-avoidance capability of radar systems.

CAORF is used for both applied and basic research, to measure the interaction between men and ships, to evaluate current operating procedures and establish new ones, and to test new equipment.

All of this can be done at less expense and without the risk inherent in at-sea testing and research, but with nearly identical results.

Sperry Systems Management, Great Neck, N.Y., designed and built the facility, and Grumman Data Systems Corporation, Bethpage, N.Y., is operating it for the Maritime Administration.

Foreign Trade Tankers Temporarily Authorized To Carry Alaskan Oil

To insure the availability of sufficient U.S.-flag tankers in handling the movement of Alaskan oil to the lower 48 states, Commerce's Maritime Administration has changed the Federal Code of Regulations affecting such traffic.

The new rule, prepared for publication in the *Federal Register*, outlines procedures under which American tankers of 100,000 deadweight tons or more, built for use in U.S. foreign trade under the federal construction differential subsidy (CDS) program, could be temporarily employed in the transportation of Alaskan oil in the domestic trade.

The regulations specifically limit the use of such vessels to the trade between Alaska and the Pacific Ocean side of the Panama Canal. Oil brought down from Valdez, Alaska, in the large CDS tankers could be transshipped in smaller U.S. tankers through the Canal to U.S. Gulf or Atlantic ports.

Under the Merchant Marine Act of 1920, Alaskan oil may be carried only on vessels built in the United States and owned by U.S. citizens. Vessels constructed with CDS, under the Merchant Marine Act of 1936 as amended, may not operate in the domestic trades except with the written consent of the Secretary of Commerce and only for a temporary period not exceeding six months in any year. During such periods, CDS funds provided to help build the vessels must be repaid on a pro rata basis.

"Under this new rule," Asst. Secretary of Commerce for Maritime Affairs Robert J. Blackwell said, "We feel confident that sufficient American-built, American-flag tankers will be available to carry Alaskan oil not required on the West Coast to the Canal for transshipment to other U.S. ports. We believe the Canal route offers the best near-term solution for handling the burgeoning Alaskan oil movement."

DROUGHT PROGRAM—*Three Northern California congressmen discuss effects of prolonged drought on the water level of Lake Folsom, a major source of water for their region. The occasion was the launching of the $175-million emergency drought program being conducted by Commerce's Economic Development Administration. Left to right: John L. Burton, Harold T. (Bizz) Johnson, John J. McFall and Secretary Kreps.*

Drought Assistance Funds Approved For Seven States

Mother Nature may not be coming through yet with drought relief, but Uncle Sam is lending a hand. Commerce's Economic Development Administration has approved more than $14 million to help carry out drought relief programs in California, Illinois, New Mexico, Oklahoma, Idaho, Washington and Colorado.

Funds included are:

—$7,466,473 for the East Bay Municipal Utility District of Oakland, Calif., for the construction of facilities for a water system serving Alameda and Contra Costa counties. The funds consist of a $5,973,178 loan and a $1,493,295 grant.

—$2,575,000 for the Clayton-Camp Point Water Commission of Camp Point, Ill., for water supply, treatment and transmission facilities. The funds are in the form of a $1,312,500 grant and a $1,262,500 loan.

—A $521,000 grant for Farmington, N.M., to help build and expand pumping stations on the San Juan River and construct a water line.

—$844,000 for the Sapulpa, Okla., Municipal Authority for the construction of a water line from Tulsa to Sapulpa. The Sapulpa funds are in the form of a $422,000 grant and a $422,000 loan.

—Two grants totaling $683,551 for Nez Perce County, Idaho. One is for $345,250 for the city of Lewiston to help improve wells and increase the pumping capacity of its water system. The other is for $338,301 for the Lewiston Orchards Irrigation District to construct a well to augment the Lewiston water supply.

—$520,800 for the University of Idaho for installation of a water recycling system to capture water from the Moscow waste treatment facility for irrigation use. The project includes the installation of pipes and construction of a holding tank. The funds are in the form of a $260,400 loan and a grant of equal amount.

—$248,400 for the city of Ellensburg in Kittitas County, Washington, to drill a well to augment the community's water supply. The funds are in the form of a $197,600 loan and a $50,800 grant.

—$1,286,000 to finance the construction of a water tank and the purchase and installation of a 2,251 water meters for Canon City, Colo. The funds are in the form of a $771,600 loan and a $514,400 grant.

Thus far, 1,742 counties in 29 States have been designated as drought impact areas. More than $25 million has been approved for drought relief. EDA has an additional $50 million in projects in the pipeline with early approval anticipated.

Each of the loans is repayable in 40 years at 5 percent annual interest.

The funds were approved under the Community Emergency Drought Relief Act signed by President Carter on May 23. The goal of the drought relief program is to help communities improve and enlarge water systems, purchase and transport water for immediate relief from drought conditions, implement water conservation measures and conduct other related activities.

U.S. Residents Again Spent Record Amounts On World Travel During 1976

U.S. residents spent a record $10.9 billion for international travel in 1976, compared with $10.1 billion in 1975, according to Commerce's Bureau of Economic Analysis. These expenditures consisted of $6.9 billion spent in foreign countries, a 7 percent increase over 1975, and $4 billion in transocean passenger fares, an 8 percent increase.

Foreign countries received $9.4 billion from U.S. travelers, including $2.5 billion paid to foreign sea and air carriers. U.S. travelers paid $1.5 billion to U.S. carriers; that amount is not included in the U.S. balance-of-payments statistics.

U.S. receipts from foreign visitors totaled $6.7 billion in 1976, 20 percent more than in 1975. The total included $900 million paid to U.S. air carriers for passenger fares to and from the United States.

The data show that:

- Net U.S. payments for international travel—the excess of U.S. travelers' payments to foreigners for travel and passenger fares over receipts from foreign visitors—were $2.7 billion, down 14 percent from 1975.
- U.S. travelers' trip costs to Europe and the Mediterranean averaged $1,180, up 5 percent from 1975. Average transocean fares increased 9 percent to $570. Land costs averaged $610 per traveler, about the same as in 1975. The average visit was 24 days, as it has been since 1974. Per capita costs averaged $25 a day.
- American travelers to areas other than Canada and Mexico numbered 6.9 million last year, compared with 6.4 million in 1975.
- The number of visitors to the United States, including transients and students, from countries other than Canada and Mexico increased 20 percent to 4.5 million.

The number of U.S. travelers to Western Europe increased 10 percent to 3.3 million in 1976. Their total outlays also rose 10 percent to $1.9 billion; average spending per traveler was unchanged.

About 2.2 million Americans visited the Caribbean and Central American areas, 7 percent more than in 1975. Their travel outlays, $800 million, remained at the 1975 level, because average spending declined.

South America was the destination of nearly 440,000 U.S. travelers who spent $200 million. Both the number of travelers and their total expenditures were slightly lower than in 1975, and average spending declined.

U.S. travel outlays in other overseas countries rose 17 percent to $900 million. The total includes about $300 million spent in African and Asian countries bordering the Mediterranean. The remainder was spent primarily in Pacific and Far East countries.

Of the 4.5 million foreign visitors to the United States from countries other than Canada and Mexico in 1976, more than three-fourths came as tourists and the rest on business, to study, or in transit to other countries. They spent $2.4 billion in this country and paid $900 million in passenger fares to U.S. carriers.

Japanese increased their expenditures 7 percent in 1976 to $440 million. Japan ranked first among overseas countries in contributing to U.S. travel receipts. About 770,000 Japanese visited this country, compared with 750,000 in 1975.

The number of European visitors rose 26 percent to 1.9 million. They spent $900 million, 40 percent more than in 1975. Nearly half of the total was spent by visitors from West Germany and the United Kingdom. Outlays here by German visitors rose 42 percent to over $200 million, and those of British visitors were up 27 percent to about $180 million. French visitors spent nearly $100 million, a 40 percent rise over 1975.

Visitors from Canada spent $2 billion, a 25 percent increase. Expenditures of Mexican visitors declined slightly to $1.4 billion, reflecting the effects of the Mexican peso devaluation in late September 1976.

Additional data on international travel were published in the June issue of the *Survey of Current Business*, the monthly publication of the Bureau of Economic Analysis. The *Survey* is available from the field offices of the Department of Commerce or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at an annual subscription price of $19, single copy $1.60.

Aquaculture Seen As Part Of The Solution To Expected Seafood Shortage

Although worldwide output from aquaculture has about doubled in the last five years to some six million metric tons, a shortage in the global supply of seafood can be expected in ten years, according to Commerce's National Oceanic and Atmospheric Administration (NOAA).

A NOAA report foresees a seafood shortage despite current landings exceeding 64 million metric tons, and an estimated maximum harvest of 100-150 million metric tons.

Roughly 10 percent of world fisheries production comes from aquaculture. In the United States, public aquaculture of salmon and private culture of oysters, catfish, trout, shrimp, clams and other species currently yields about 65,000 metric tons, about 3 percent of landings, or 2 percent of total consumption of fishery products.

The potential is good for increasing fisheries production in the United States, according to NOAA, by expanding public hatcheries, and by encouraging private farming of fish and shellfish. However, a national policy is needed to recognize that the development of aquaculture is in the national interest, and to call for the protection of coastal and estuarine environments so that they can support the production of aquatic foods.

The report includes state-of-the-art summaries of the culture of high priority species, such as salmon, marine shrimp, freshwater prawn, American lobster, oyster and marine plants; medium priority species including clams, catfish, abalone, scallop and yellow perch; and low priority species, such as mussels, crab, and various marine fishes.

Most of the expanded program would be conducted by joint efforts with individuals, firms, educational institutions, or state agencies.

Copies of the NOAA Aquaculture Plan, published in May as a NOAA Special Report, are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Credit Unions' Economic Development Role To Expand

The nation's credit unions may soon expand their economic development activities through a Commerce-sponsored program.

A grant of $106,399 to help expand a national program demonstrating the value of community-owned credit unions has been announced by Commerce's Economic Development Administration.

The program is seeking to demonstrate the effectiveness of community-owned credit unions in financing housing repairs and new construction, and in stimulating overall economic growth.

The grant will go to the Center for Urban Ethnic Affairs.

The Washington-based firm will use the funds to plan and conduct the program in five neighborhood credit unions which the center is already helping: one sponsored by Amigo Unidos in San Juan, Texas, the Guadalupe Organization in Guadalupe, Ariz., the Casa Credit Union of Springfield, Mass., the St. Joseph's County Community Credit Union of South Bend, Ind., and the St. Peter's Credit Union of Hartford, Conn.

The program will offer management and technical assistance to help local credit unions expand by encouraging deposits from non-members such as industrial firms, banks, and churches.

It will also provide training to local officers in coordinating investments of credit union funds with plans for neighborhood development of businesses and for attracting job-generating industries.

Nonfinancial Productivity Back Up In First Quarter

Productivity in nonfinancial corporations increased 2.6 percent in the first quarter of 1977 (at a seasonally adjusted annual rate), according to figures from the Bureau of Labor Statistics of the U.S. Department of Labor.

The increase reflected a 5.7 percent increase in output and a 3 percent increase in hours of all employees. In the preceding quarter, productivity declined 1.2 percent in this sector, which includes all corporations doing business in the United States with the exception of banks, stock and commodity brokers, and finance and insurance companies.

Hourly compensation (which includes both wages and supplements) in the nonfinancial corporate sector increased at an annual rate of 11.5 percent in the first quarter of 1977, compared with a 7.8 percent increase one quarter earlier. This was the largest quarterly increase in hourly compensation in two years. Combined with the rise in productivity, this increase in compensation resulted in an 8.7 percent increase in unit labor cost.

Real compensation per hour—hourly compensation adjusted for changes in the Consumer Price Index—increased at an annual rate of 3.2 percent in the first quarter, the biggest quarterly increase in a year.

Unit profits declined 8.1 percent during the first quarter, compared with a 24.5 percent drop in the preceding quarter. Unit nonlabor payments, which include profits as well as all other nonlabor costs, decreased 0.2 percent in the first quarter, compared with a 1.3 percent drop during the fourth quarter.

Total unit costs—including unit labor cost, unit nonlabor costs and unit profits—increased 7.1 percent in the first quarter, compared with a 9.3 percent increase in the preceding quarter.

Revised first quarter measures have been issued for the private business, non-farm business and manufacturing sectors. These show larger productivity gains than had been reported earlier.

The revised figures show that productivity (at annual rates) increased 4.7 percent in the private business sector and 4.1 percent in the nonfarm business sector and declined 0.2 percent in manufacturing. Preliminary figures had been 3.2 percent, 2.6 percent and −0.1 percent, respectively.

KEY BUSINESS INDICATORS

Indicators	Unit or base	Latest month or quarter		Previous month or quarter	Same period year ago	Low (1961-77)	High (1961-77)
PERSONAL INCOME							
seas. adj. annual rate	(bil.$)	May	1,507.2	1,497.7	1,362.9	403.8 (Jan. '61)	1,507.2 (May '77)
GROSS NATIONAL PRODUCT							
seas. adj. annual rate	(bil.$)	1Qr	1,799.3	1,745.1	1,636.2	507.1 (1Q '61)	1,799.3 (1Q '77)
CORP. PROFITS BEFORE TAX [1]							
seas. adj. annual rate	(bil.$)	1Qr	119.9	117.8	115.1	42.1 (1Q '61)	122.0 (3Q '76)
COMPOSITE INDEX OF LEADING INDICATORS	(1967=100)	May	130.6	130.8	124.5	72.7 (Jan. '61)	133.7 (June '73)
MANUFACTURING NEW ORDERS							
seas. adj. total	(bil.$)	May	111.6	111.6	99.0	28.7 (Jan. '61)	111.9 (Mar. '77)
MANUFACTURING SHIPMENTS							
seas. adj. total	(bil.$)	May	109.5	109.6	98.2	29.1 (Jan. '61)	111.4 (Mar. '77)
BUSINESS INVENTORIES							
seas. adj. total	(bil.$)	Apr.	310.3	307.3	283.1	93.7 (June '61)	310.3 (Apr. '77)
INDUSTRIAL PRODUCTION INDEX [2]							
seas. adj.	(1967=100)	May	137.8	136.3	129.6	62.9 (Feb. '61)	137.8 (May '77)
PRIVATE HOUSING STARTS							
(non-farm and farm) seas. adj. ann. rate	(thous.)	May	1,929	1,899	1,435	843 (Oct. '66)	2,494 (Jan. '72)
CIVILIAN LABOR FORCE [3]							
seas. adj. total	(mil.)	June	97.6	97.2	94.7	70.1 (Dec. '61)	97.6 (June '77)
Employed	(mil.)	June	90.7	90.4	87.5	65.4 (Apr. '61)	90.7 (June '77)
Nonagricultural	(mil.)	June	87.3	87.0	84.2	60.1 (Feb. '61)	87.3 (June '77)
Agricultural	(mil.)	June	3.3	3.4	3.3	3.1 (Jan. '77)	5.5 (Feb. '61)
Unemployed	(mil.)	June	7.0	6.8	7.2	2.7 (Dec. '68)	8.3 (May '75)
Unemployment rate	(%)	June	7.1	6.9	7.6	3.4 (Feb. '69)	9.0 (May '75)
CONSUMER PRICE INDEX [3]	(1967=100)	May	180.6	179.6	169.2	89.3 (May '61)	180.6 (May '77)
EXPORTS & REEXPORTS							
(excluding Dept. Defense Shipments)	(mil.$)	May	10,395	9,970	9,563	987 (Jan. '63)	10,410 (Dec. '76)
GENERAL IMPORTS							
F.A.S. transaction value	(mil.$)	May	11,616	12,593	9,182	1,089 (Jan. '63)	12,593 (Apr. '77)
C.I.F. value	(mil.$)	May	12,404	13,419	9,873	(4)	(4)

Original data from the Bureau of Economic Analysis and the Bureau of the Census except as noted.
[1] Including inventory valuation and capital consumption adjustments.
[2] Federal Reserve Board.
[3] Bureau of Labor Statistics.
[4] Data on C.I.F. basis not available prior to January 1974.

As of July 11, 1977
p = preliminary. r = revised.

Contract Awarded To Find Laboratories Capable Of Testing Solar Collectors

To identify laboratories that are interested in and capable of testing solar collectors to be used in a National Solar Heating and Cooling Demonstration Program, Commerce's National Bureau of Standards (NBS) has awarded a contract to the Air Conditioning and Refrigeration Institute Foundation, Inc., (ARIF).

The contract is being carried out with financial support from the Energy Research and Development Administration (ERDA) and the Department of Housing and Urban Development (HUD). These agencies are responsible for the demonstration program.

ERDA reports that 166 commercial nonresidential solar projects are under contract, of which 17 are in operation. HUD, meanwhile, has 5,032 solar residential projects under contract, of which 155 are in operation. Beyond this, the Department of Defense has 130 residential solar projects under contract, none of which are in operation. Three other experimental residential solar projects are in operation, mainly at universities.

ARIF, Inc., will establish criteria for evaluating a laboratory's capability to test collectors, evaluate questionnaire information submitted by testing laboratories, and make site visits to the prospective laboratories.

All qualified laboratories will test solar collectors in conformity with the new American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 93-77, "Methods for Testing the Thermal Performance of Solar Collectors." The basis for this standard was developed at NBS.

The contract with ARIF, Inc., also requires it to develop a draft rating standard for solar collectors as well as draft documentation for a certification program for solar collectors. At present, there are no national rating standards or certification program for solar collectors.

Standardized testing and rating procedures will provide a means of evaluating and comparing equipment in a meaningful and consistent way and will provide an equitable basis for competition among manufacturers. They will also serve as a basis for selection of equipment by consumers.

The contract is expected to be completed by October 31. The list of qualified testing laboratories will be submitted to ERDA and HUD about August 1.

Robert Evans, of ARIF, Inc., says that two questionnaires have been sent out to laboratories. Site visiting is being made to laboratories to see if they are qualified under the required standard. He anticipates that his organization will designate 10 or 15 of the laboratories as qualified.

Interested testing laboratories should contact Robert Evans, ARIF, Inc., 1815 North Fort Myer Drive, Arlington, Va. 22209 (703-524-8800).

Cloud-Seeding Technique Brings 20-70% More Rain

Preliminary experiments indicate that cloud-seeding increases rainfall in a local area by from 20 to 70 percent.

The indication of increased rainfall comes from recent analysis of data obtained in last summer's Florida Area Cumulus Experiment, and from four earlier seasons of field experimentation conducted by Commerce's National Oceanic and Atmospheric Administration (NOAA).

If the results hold up under further analysis, they will answer one of the most persistent questions in experimental meteorology: Does seeding increase total rainfall, or merely increase rainfall in the seeded cloud while suppressing precipitation nearby?

"There is now persuasive statistical evidence," says Dr. William L. Woodley of NOAA, "that dynamic seeding in Florida is effective in increasing the size and rain production of individual convective clouds. And there are strong indications that dynamic seeding can produce a net increase in rain over a fixed target area."

Dynamic seeding is a technique pioneered by Woodley's Cumulus Group in the Miami-based National Hurricane and Experimental Meteorological Laboratory, one of NOAA's Environmental Research Laboratories.

"In 1975 we identified rainfall increases caused by dynamic seeding in what we call the 'floating target,' the clusters of seedable clouds that are selected for seeding. We had hoped that the 1976 field season would resolve our final uncertainty regarding rainfall in the total target area. Now we have strong indications that it did."

NOAA says the next step will be a substantially larger experiment, with about twice the level of effort over a five-year period.

This experiment would explore what effects, if any, are produced outside the target area. It would also help NOAA researchers determine whether the technology developed for the moist convective clouds of tropical Florida could be transferred to the slightly different cumulus clouds of other regions.

U.S.-Owned Foreign Flag-Vessels Listed

A new publication from Commerce's Maritime Administration provides a summary of foreign flag ships owned by American companies. *Foreign Flag Merchant Ships Owned By U.S. Parent Corporations* lists vessel type, owner's name, details on flag, country of construction and other characteristics.

Also included is similar information for vessels currently under construction or on order which will be American-owned but operated under a foreign flag.

The brochure is available for $1.30 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Order Number 003-007-00078-02.

New Standard Materials Aid Disease Diagnosis

A more accurate assessment of health problems such as anemia, dehydration and myeloma (a form of bone cancer) will be possible with two new Standard Reference Materials (SRMs) developed by Commerce's National Bureau of Standards (NBS). The new SRMs, bovine serum albumin in solution or as a powder, will aid clinical laboratories and physicians in quantifying the amount of protein in biologic fluids—a useful indicator of disease. For example, myeloma interferes with the production of red blood cells, and is characterized by a high protein level in the blood.

The two SRMs were developed by NBS under the sponsorship of the National Institute of General Medical Sciences of the National Institutes of Health. They are used for calibration and standardization of protein analysis for elevation of daily working standards used in these procedures.

The SRMs are also used by manufacturers of working clinical standards and kits to assure the quality of these products. Both SRMs conform to the specifications of the National Committee for Clinical Laboratory Standards.

The need for the new SRMs was revealed in a New York State Department of Health survey of 350 laboratories which found that 35 different materials were used as protein standards. Another survey found that several protein values were reported for a single specimen because of the different standards. An international survey indicated that over half of the total serum protein results were found to be unacceptable.

By providing a single protein standard the new SRMs should increase the accuracy of total protein determinations and improve the comparability of protein assays between laboratories in both the research and clinical fields.

The price of the powder (SRM 926) is $203 for a five-gram quantity in a sealed bottle. The solution (SRM 927) costs $122 for 10 vials each containing 2.15 mL of solution. They may be ordered from the Office of Standard Reference Materials, Room B311, Chemistry Building, National Bureau of Standards, Washington, D.C. 20234.

Fleet Of Seagoing 'Blotters' May Sop Up Future Oil Spills

A fleet of small boats, capable of being shipped anywhere in the world to clear the seas of oil spills, may result from research supported by Commerce's National Oceanic and Atmospheric Administration (NOAA).

The likelihood of such a fleet became much stronger after recent successful seagoing trials of a prototype oil spill recovery boat designed and built with support from NOAA's National Sea Grant Program and Gulf Tampa Drydocks.

The 24-foot boat is the concept of University of South Florida physicist Joe Turbeville and uses a thick blanket of patented magnetic ferrofoam, in the form of small pads, to sop up the oil. The pads are picked up magnetically by drums, squeezed through a wringer that sends the oil into storage tanks, and then are reused.

Estimated recovery rate for each unit is expected to be about 2,400 gallons per hour per knot, according to Turbeville.

While the unit is not designed to recover heavy crude oil, it works well with lighter crudes and diesel oil.

Turbeville termed the results of the recent sea tests as "Good! It functioned like we wanted it to," he explained, "and it picked up everything we hoped it would. The biggest thing we proved was that the ferrofoam would be picked up by the magnetic drum."

The boat has twin pontoons and is equipped with deflectors on the bow, which funnel the oil between the hulls as the boat moves through the water.

Although the physicist has not made a thorough cost-benefit analysis of the recovery system, he estimates that a more sophisticated model of his prototype could recover oil at a cost of a penny a gallon.

He does not envision large recovery ships being built. Rather, he believes, future models should be relatively small. "In this way," he said, "they offer more flexibility. If, for example, there were small fleets of these boats, they could be transported to any location in the world where there had been an oil spill. There would be no transport problem at all."

Foreign interests already have expressed interest in the project, and one nation has proposed that Turbeville bring his boat for a year of further testing.

BOATING EXPORTS—*Pleasure boat manufacturers and ocean carrier representatives met at Commerce recently to discuss export problems of builders of U.S. pleasure boats (above). Commerce representatives were (from left) William Mitchell of Maritime Administration, and George R. Delgado, Office of Business Research and Analysis.*

Shippers, Carriers Meet To Solve Export Problems

Pleasure boatbuilders met with representatives of a number of ocean carriers recently at the Department of Commerce to discuss the availability of deck space for shipments of odd-size pleasure craft.

Difficulties have been encountered by pleasure boat firms which ship large craft not fitting in vans or trailers when ships calling at neighboring ports offer only containerized service, according to Commerce's Office of Business Research and Analysis. As a result, pleasure craft shipments have had to be rerouted to more distant ports necessitating higher inland transportation costs.

At the recent meeting, the problem was identified as lack of communication between the shipper and the carrier. As carriers become aware that a worthwhile volume of cargo is available from boat builders, ships with the necessary deck space can be routed to the required port.

Carrier representatives at the meeting described the routes they serve, sailing frequency, types of ships operated and other information of interest to shippers of odd-sized cargo. The shippers, in turn, were able to consult on specific problems with the carriers.

Boat builders agreed that their trade association, the National Association of Engine and Boat Manufacturers, should become actively involved in assisting its exporting members by acting as a clearing house for shipping information and by researching such matters as the establishment of freight rates based on volume shipments that would make American pleasure boats more competitive abroad.

Directory Outlines Funds For Business Development

Businesses seeking a single source for current, basic data on the financial assistance programs of the 50 states and 10 federal agencies can look to the 1977 edition of the *Directory of State and Federal Funds for Business Development.*

The concise directory is the starting point for any business which seeks to relocate or expand. By using this data base, management can compare, select or discard a wide range of business aid programs without collecting and sorting through volumes of official literature.

Moreover, it opens up relatively unexplored avenues for financial assistance where conventional debt and equity financing are inappropriate or unavailable.

The directory is available only from the publisher, Pilot Books, 347 Fifth Ave., N.Y. 10016 at $5 per copy, postpaid.

TRIAL VOLUNTARY PRODUCT LABELING PROGRAM BEGINS

The Commerce Department has launched, on a one-year trial basis, a voluntary consumer product information labeling program in the interest of providing performance information as a guide to consumers in their purchases.

The program was explained at a news conference at which Dr. Howard I. Forman, Director of the Office of Product Standards, the office which will administer the program, encouraged participation by manufacturers and consumers.

"We are encouraging consumers and manufacturers," Forman said, "to write and tell us which products they would like to see labeled."

The program is designed to make objective performance information available to consumers at the point of sale. Examples of performance information might include load capacity, use of energy, noise level, strength, or durability.

The purpose is to provide the information in an understandable manner so that the consumer can use it as a basis for comparing the performance specifications of competing products.

Forman said the program should result in fewer complaints from consumers who protest that they didn't understand the performance characteristics of a product prior to purchase. These characteristics would be provided by participating manufacturers on labels attached to the products.

The labels will contain a distinctive Commerce Department mark. In order to use the labels, the manufacturers will be required to follow test methods approved by Commerce's National Bureau of Standards. If a participating firm doesn't go by the rules, it will be dropped.

Participation in the program is voluntary and is open to any manufacturer, assembler, private brand labeler, or importer of consumer products for resale.

The pilot phase of the program will last one year, by which time it is hoped that between one and three products will be labeled. At the end of the year, the Department will evaluate the results and determine whether the program merits continuation.

Thus far, products suggested for labeling include home insulation, vacuum cleaners, shower heads, storm doors and windows, automotive accessories and repair equipment, carpeting, "hard" floor covering, paint and painting equipment, heat pumps, lawn mowers, hedge trimmers, shoes, mattresses, attic fans, smoke detectors; electric irons; hand calculators; hand-sized radios; 9-volt batteries; ultra high molecular weight polyethylene (plastic sheets); automobile and furnace efficiency devices; and solar equipment.

Forman said three products probably would be as many as would be chosen for labeling in the trial period of the first year, but many more would be selected in the second year if the program is continued.

Decisions will be made, he said, as to priorities by which products will be selected for labeling. After products have been selected, they will be published in the *Federal Register*, and will be open to public comment.

Esther Peterson, Special Assistant to the President for Consumer Affairs, told the news conference she had long felt the need for making more informative data available to the consumer at the point of purchase. Consumers too frequently have been downgraded, she said.

In the last 10 years, she said, there has been a marked change in the kind of information the consumer wants, indicating a growing awareness on the part of consumers and a need for more significant information.

Stressing the need for the proposed Agency for Consumer Protection, she said she hoped that it would be approved and would become the technical arm of the effort to see that consumers are better served than heretofore.

Better information for consumers, she said, will mean that business will compete on the basis of quality and will talk out to consumers instead of down to them.

Polls show, she said, that people are willing to pay more for products if they can be sure of quality.

She said she believed the Office of Product Standards will be extremely helpful in achieving the goal of competition on the basis of quality, and that she looked forward to working closely with the agency.

In response to questions, Dr. Jordan J. Baruch, Assistant Secretary of Commerce for Science and Technology, said the task of the Office of Product Standards is to set up a system of measures which enable the consumer to determine whether a particular product was better for his needs than another.

He said it was not the task of the office to attempt to say what is good or bad, or safe or unsafe. The government, he pointed out, has enforcement agencies to deal with such problems.

The budget for the office for the first year, he explained, will be $300,000. Asked about the cost to the manufacturer for labeling his products, he replied, "peanuts." Participants in the program will be charged a fee for the use of the label and the distinctive Commerce Department mark, or logo. The fee will be based on the number of products labeled.

Labels will be attached to the products by the manufacturers in accordance with specifications approved by the Commerce Department. The Department will not test the labeled products, but the information supplied by the manufacturer must adhere to the test methods of the National Bureau of Standards, which also will be the agency to which enforcement agencies turn for their information.

The Commerce Department proposed that a consumer product information labeling program should be developed in an announcement in the *Federal Register* May 25, 1976. The notice invited public comment and advised that three informal hearings would be held. The hearings were held in June 1976 in Los Angeles, Chicago, and Washington, D.C.

The Department received 64 responses favoring the program including private citizens, consumer organizations, educators, government agencies, and certain manufacturers. Twenty-three respondents opposed the program including trade associations and manufacturers of mechanical, electrical and electronic products. Seven respondents favored a mandatory program, which was beyond the scope of the Department's proposal.

The desire for adequate product information at the point of sale for consumers has been expressed by four previous Administrations as well as the present Administration. In a 1973 report, the National Business Council for Consumer Affairs recommended: "Whenever appropriate, manufacturers should promote the development of mechanisms for providing consumers with performance information on consumer durables."

At least eight European countries operate similar voluntary national information labeling programs, reportedly with varying degrees of success. They are: Denmark, Finland, Norway, Sweden, France, West Germany, the Netherlands, and Switzerland.

Electronic Fact Book Available At Discount

The *Electronic News Financial Fact Book and Directory*, to be published this fall, is available at a 20 percent prepublication discount if ordered before September 1.

The new edition of this publication will run to more than 600 pages. It will provide in-depth financial profiles of approximately 800 publicly-owned corporations in the electronics industry.

Coverage will include all important profit, sales, net worth and dividend ratios, plus key data on personnel, addresses, divisions and product classifications. In addition, a cross-referenced index identifies electronic subsidiaries and divisions.

The 1977 edition of the *EN Fact Book* will be priced at $75, but is available for $60 if ordered before September 1 from: Fairchild Books, 7 East 12th Street, New York 10003 (212-741-4067).

Maritime Study Sees Use Of U.S. Flag Carriers Feasible In Great Lakes-Europe Trade

A study commissioned by Commerce's Maritime Administration has recommended two types of competitive shipping systems to serve the Great Lakes: an all-container service employing five ships, and a combination dry bulk/container service requiring seven ships. Both systems would provide weekly service between Detroit and Chicago in the Great Lakes and selected ports in Western Europe, using the St. Lawrence Seaway.

The study, *Great Lakes-Overseas Marine Transportation Market Assessment*, was performed by Simat, Helliesen and Eichner, a Boston-based consulting firm. It evaluated 42 variations of alternative marine transportation systems as potential competitors in a Great Lakes-overseas system, employing market surveys, modal split analyses and required freight rate models.

Market penetration, financial considerations and competition from alternative modes and routes were all taken into account in making final recommendations. During the winter months when the St. Lawrence Seaway is closed, rail transportation would be employed to move the cargoes to and from Detroit and Chicago and East Coast ports.

The study contains a sound business analysis framework and detailed information on Great Lakes shipping, such as port profiles, shipper interview information, cargo data, and rail and terminal cost data, all of which can be useful to those interested in shipping opportunities of the United States "fourth seacoast."

Executive summaries are available for $4 each from National Technical Information Service, 5285 Port Royal Rd., Springfield, Va. 22161, Order Number PB 266090/CZ.

Quality Control Recordings From Conference Available

Tape recorded presentations from the American Society for Quality Control (ASQC) 31st Annual Technical Conference held in May are available from the Society.

Some 75 individual presentations and panel sessions are offered on 37 cassette tapes. Topics include: product liability, experiences in worker participation, industrial problem solving, standards development, patient care, metals processing, print quality, needle trade quality challenges, nuclear personnel training, food processing and packaging, and drugs and good manufacturing practices, and many more.

A free leaflet detailing the recordings may be ordered from: ASQC, Dept. PIO, 161 W. Wisconsin Ave., Milwaukee, Wis. 53203 (414-272-8575).

Calendar Of Business Events

July 24-28—Atlanta—Atlanta Gift Show, Atlanta Mart & Georgia World Congress Center. Contact: Candy Diehl, The Atlanta Mart, 240 Peachtree St., Atlanta, Ga. 30303 (404-688-8994 or, tollfree, 800-241-1266.)

July 29—Oriskany, N.Y.—Federal Procurement Conference, Trinkas Manor. Sponsors: U.S. Rep. Donald J. Mitchell & Emergency Business Assistance Committee. Contact: Peter Larkin c/o Rep. Mitchell, 1527 Longworth House Office Bldg., Washington, D.C. 20515 (202-225-3665).

July 31-Aug. 3—Anaheim, Calif.—International Appraisal Conference, Disneyland Hotel. Contact: Karen Linden, Society of Real Estate Appraisers, 7 S. Dearborn, Chicago 60603 (312-346-7422).

July 31-Aug. 5—Chicago—Chicago Gift Market, McCormick Place, Expocenter & Merchandise Mart. Contact: Nancy Pratt, George Little Mgt., 261 Madison Ave., New York 10016 (212-986-8000).

July 31-Aug. 6—Boulder, Colo.—Cryogenic Engineering Conference, U. of Colorado. Contact: Dee Belsher, NBS, Boulder (303-499-1000 ext. 3981).

Aug. 1-3—New York—National Conference on Financing U.S. Energy Requirements, The Plaza Hotel. Sponsors: Bureau of National Affairs & Council For Energy Studies. Contact: Frederick Tagg, Dir., Educational Programs, BNA, 1231-25th St. NW., Washington, D.C. 20037 (202-452-4412).

Aug. 2-5—Culver City, Calif.—Microcomputer & Microprocessor Short Courses, Ramada Inn. Contact: Integrated Computer Systems, Inc., 4445 Overland Ave., Culver City 90230 (213-559-9265).

Aug. 8-9—Chicago—Effective Production Planning & Inventory Mgt., Sheraton Chicago Hotel. Sponsor: The Wharton School. Contact: Heidi Kaplan, New York Mgt. Center, 360 Lexington Ave., New York 10017 (212-953-7262).

Aug. 8-9—New York—Estimating & Controlling Mfg. Costs, Barbizon Plaza Hotel. Sponsor: New York U. Contact: Heidi Kaplan, see address above.

Aug. 8-11—Orlando, Fla.—Management, Finance & Design/Build/Lease Seminars for the construction industry, conducted by Jack Miller, Orlando Hyatt House. Contact: Walter Johnson, Group Communications, 6101 Southwest Freeway, Suite 401, Houston, Tex. 77057 (713-664-8818).

Aug. 9-12—Alexandria, Va.—Microcomputer & Microprocessor Short Courses, Ramada Inn. Contact: ICS, see address above.

Aug. 10-12—College Station, Tex.—25th Annual American Society of Civil Engineers Hydraulics Specialty Conference, Texas A & M. Contact: Robert E. Schiller, Jr., Dept. of Civil Engineering, Hydromechanics Bldg., Texas A & M, College Station, Tex. 77843 (713-845-4515).

Aug. 12—Fargo, N.D.—Federal Procurement Conference. Sponsor: U.S. Rep. Mark Andrews. Contact: Dale Anderson, Greater N.D. Assn., P.O. Box 1781, Fargo, N.D. 58102 (701-237-9461).

Aug. 14-19—New York—N.Y. Gift Show, N.Y. Coliseum & N.Y. Sheraton. Contact: Little Brothers Shows, Inc., 261 Madison Ave., N.Y. 10016 (212-986-8000).

Aug. 15-26—Chicago—LNG Fundamentals, Institute of Gas Technology. Contact: Kathy Fisher, IGT, 3424 S. State St., Chicago 60616 (312-567-3881).

Aug. 16-18—San Diego—Group Technology Seminar, Sheraton Harbor Island Hotel. Contact: Mark Stratton, Society of Manufacturing Engineers, P.O. Box 930, Dearborn, Mich. 48128 (313-271-1500).

Aug. 16-19—Atlanta—Microcomputer & Microprocessor Short Courses, Peachtree Plaza Hotel. Contact: ICS, see address above.

Aug. 22-23—New York—New Products Seminar, Barbizon Plaza Hotel. Sponsor: N.Y.U. Contact: Heidi Kaplan, see address above.

Aug. 22-25—Los Angeles—Marketing & Design/Build/Lease Seminars for the construction industry, conducted by Jack Miller, Disneyland Hotel. Contact: Group Communications, see address above.

Aug. 22-26—Boulder, Colo.—Time & Frequency: Standards, Measurements, Usage, National Bureau of Standards. Contact: Helmut Hellwig, NBS, Boulder 80302 (303-499-1000 ext. 3277).

Aug. 22-26 — Dallas — Fundamentals of Plastics Seminar, Dupont Plaza Hotel. Sponsor: N.Y. U. Contact: Heidi Kaplan, see address above.

Aug. 26 — Madison, Wis. — Federal Procurement Conference, Holiday Inn #2, Southeast. Sponsor: U.S. Rep. Robert W. Kastenmeier. Contact: Otto Festge, c/o Rep. Kastenmeier, 119 Monona Ave., Madison 53703 (608-252-5206).

Greece, Turkey To Expand Mining, Mission Reports

U.S. GROUP SEES MARKET FOR EQUIPMENT, BUT CREDIT, FOREIGN EXCHANGE SHORTAGES LIMIT IMMEDIATE SALES

A significant potential for sale of mining and related equipment in Greece and Turkey is reported by a recent U.S. trade mission that visited Athens, Istanbul, and Ankara. Both countries are planning expansion in mining activity. The consensus of the mission, however, is that sales prospects are largely for the longer term, as the current shortage of foreign exchange and credit limits immediate opportunities.

Representatives of 11 U.S. firms comprised the mission. The majority were manufacturers; others offered geotechnical engineering and geological consulting services. Products included heavy-duty loaders, mining shovels, safety equipment, mineral exploration equipment, 100-ton-capacity dump trucks and coal haulers; pumps and parts, valves, tools, bits.

In Turkey, the mission found Istanbul the headquarters of mining activity by the private sector; in Ankara, the public sector is predominant in such operations. The Turkish Coal Administration (TKI) and the National Steel Industry have planned expenditures of more than $300 million in the next five to ten years for development and expansion. These plans call for procurement of the kinds of equipment offered by the firms participating in the mission. The Government of Turkey is looking to both the East and the West for help in financing its projects. Mission Director Gayle C. Shelton, who heads the Commerce Department's Birmingham District Office, reported the opinion of the group that U.S. manufacturers will be able to exploit this market only if satisfactory financial and credit lines are found.

One mission member, observing that the potential for sales to the Turkish Government is considerable, pointed out that TKI plans to increase lignite production from 9.5 million tons this year to some 97.5 million tons in 1987. This goal would require the purchase of 22 mining shovels of 15-cubic-yard size (average value, $1.5 million each), and 36 shovels in the 10- to 12-cubic-yard range (average value, $1 million each). The Turkish Iron and Steel Authority plans a large iron ore project, with an annual production goal of 40 million tons, which would require probably eight to ten 15-cubic-yard mining shovels over the next five years, and additional machines later. The private sector also offers some potential, but it is more limited.

"If we are to secure this business," the mission member noted, "it is essential that financing be made available at competitive rates from the United States; otherwise, the equipment will be ordered elsewhere." The need to provide dependable access to spare parts, and operational and maintenance instructions in the Turkish language, also was emphasized.

In Athens, government officials recently have stressed the importance of the mineral sector to Greece's economic restructuring and future growth. The private sector plans to spend millions of dollars in plant and equipment, and mineral research and exploration. Major investments have been announced for alumina, magnesite, and nickel facilities. Lignite production also has assumed a high priority, with the increased cost of oil.

The mission toured the laterite open pit mines of the Larco Hellenic Mining & Metallurgical Co., and visited the mining, stock piling, and loading facilities in the Pagonda Mountains. Several of the members observed some of their firms' equipment in use at the mine site.

Shelton said that the severe shortage of capital funds and credit facilities available to the Greek mining interests at present did not discourage participants from pursuing opportunities to establish agent/distributor agreements. One such agreement was signed in each country during the mission. For the two countries, the U.S. firms expect sales in the next year or two to reach some $22.8 million.

Companies participating in the mission were: Drilco Industrial, Div. of Smith Int'l, Inc., Midland, Tex.; Eimco, Salt Lake City; ESB Inc.; Willson Products Div., Reading, Pa.; Esco Int'l, Portland, Ore.; Golder Associates, Inc., Kirkland, Wash.; Harnischfeger Int'l Corp., Milwaukee; Ingersoll-Rand Co., Woodcliff Lake, N.J.; Longyear Co., Minneapolis; Nash Int'l Co., Norwalk, Conn.; Paccar Int'l Inc., Bellevue, Wash.; and TRW-Mission Manufacturing Co., Houston.

CONFERRING IN ANKARA—*Mission member Leland E. Terry (right) of ESCO International, Portland, Ore., talks about his company's mining equipment.*

Official Trade Briefs

This article is another in a series of reports that describes actions affecting world trade, as compiled by the Legislative and Tariff Policy Division of the International Economic Policy and Research Bureau's Office of International Trade Policy.

THE PRESIDENT

Export Administration Act: The President signed into law H.R. 5840, the Export Administration Amendments of 1977, which extends the Export Administration Act of 1969 and contains provisions designed generally to improve export administration and to strengthen U.S. policy against compliance with foreign boycotts (see detailed story on page 7 of June 20 issue).

Import Relief: The United States and the Republic of Korea have signed an orderly marketing agreement (OMA) which limits Korean exports of **footwear** to the United States to 33 million pairs for the year beginning June 28, 1977. The agreement, to be in effect for four years, provides for an approximate 15 percent increase in the quota level with the final year's level not to exceed about 38 million pairs. This agreement and a similar one concluded last month with the Republic of China follow affirmative findings of import injury, by the U.S. International Trade Commission, under the "escape clause" provisions of Title II of the Trade Act of 1974 and a Presidential determination that OMA's offered a more appropriate avenue of relief to the domestic footwear industry than the import restrictions recommended by the ITC.

CONGRESS

Enrolled Enactment: The House concurred in the Senate amendments to H.R. 1401, to permit duty-free entry of 33 **carillon bells** for Smith College, Northampton, Mass., thus clearing the measure for the President.

Bills Passed-Senate: The Senate on June 14 passed H.R. 5262, with Senate amendments, authorizing U.S. subscriptions and contributions to six **international financial institutions.** The Senate has requested a conference with the House and has appointed conferees.

Prior to Senate passage of H.R. 6714, authorizing funds for fiscal year 1978 for **International Development Assistance,** an amendment was adopted calling for a study to be conducted by the Departments of Commerce, State and Agriculture on the payment of ocean freight differentials between U.S.-flag rates and foreign-flag rates when U.S.-flag vessels are required to be used in accordance with section 901 (b) of the 1936 Merchant Marine Act, dealing with cargo preferences. A conference with the House of Representatives was requested.

Bills Reported-Senate: The Senate Committee on Foreign Relations reported, without amendment, H.R. 5638, to make the reciprocal **fishery agreement** between Canada and the U.S. effective during 1977.

Committee Action-Senate: The Finance Committee held hearings on the President's recommendation to continue Most-Favored-Nation tariff treatment of imports from **Romania,** and to extend his authority to waive application of subsections (a) and (b) of section 402, the freedom of emigration provision, of the Trade Act of 1974. Testimony was heard from Alan Reich, Acting Deputy Assistant Secretary of Commerce for East-West Trade, and other public and private witnesses.

Pending in the Senate Committee on Environment and Public Works is H.R. 3199, to amend the **Federal Water Pollution Control Act** to provide for additional authorizations. H.R. 3109 contains a "Buy American" provision which requires that any unmanufactured or manufactured materials for use in construction and maintenance of treatment works financed by any grant under this Act be of domestic origin.

Committee Action-House: The Ways and Means Committee completed initial consideration of the tax provisions, Title II, of H.R. 6831, **National Energy Act.** In actions affecting international trade, the Committee deleted the rebate proposal for fuel efficient automobiles and revised the Administration proposed "gas guzzler" tax recommendation.

In other action, the Ways and Means Committee has released a report of the International Trade Commission (ITC), submitted pursuant to the Committee's request that an investigation be conducted to determine the need to provide import protection for the domestic **watch** industry and the probable economic effect of the provisions of H.R. 14600, a bill of the 94th Congress which would have reclassified and raised the duty on imports of digital watches. The report indicates that the Commission determined unanimously that there is no need to protect the domestic watch industry which produces both conventional and nonconventional (digital) watches and that enactment of the provisions of H.R. 14600 would adversely affect the watch industry.

The Subcommittee on Trade of the House Ways and Means Committee will hold hearings July 19-22 on H.R. 8149, a bill to provide for reform of and improvements in **customs procedures,** including section 592, the fraud and penalty provision of the Tariff Act of 1930, and on H.R. 7856, a bill to amend **general headnote 3(a)** of the Tariff Schedules of the U.S. to apply duty-free treatment under certain circumstances to articles produced in the insular possessions of the U.S.

The Subcommittee also scheduled hearings for July 15 and 26 on the Trade Adjustment Assistance Programs under Title II of the Trade Act of 1974. The purpose of the hearings is to review the operation of the **trade adjustment assistance** programs for workers, firms and communities and to receive views on proposals for legislative and administrative changes to improve the effectiveness of these programs.

The House International Relations Committee has reported favorably H.R. 7738. The bill contains provisions affecting both the **Trading with the Enemy** and **Export Administration Acts** and would allow the President to retain limited power to declare, when specified criteria are met, a national emergency, and regulate international transactions pursuant to the declaration. The President would be required, however, to consult with the Congress, whenever possible, before making such a declaration.

The Subcommittee on International Economic Policy and Trade of the Committee on International Relations held hearings on H.R. 3603, the **Overseas Private Investment Corporation** Amendments Act of 1977. Testimony was heard from Commerce's Assistant Secretary for Domestic and International Business Frank Weil, representatives of the Departments of Treasury and State and private witnesses.

In further action by the Subcommittee, an executive hearing was held on **computer** exports to the Soviet Union. Testimony was heard from public and private witnesses.

Conference: The House disagreed with the amendment of the Senate to H.R. 6360, to authorize appropriations for the **International Trade Commission** for fiscal year 1978, to provide for Presidential appointment of the chairman and vice chairman of the Commission, and to provide for greater efficiency in the administration of the Commission. The House has asked for a conference with the Senate.

In addition, a conference committee met to resolve the differences between the Senate and House passed versions of H.R. 5262, providing for increased U.S. participation in certain **international institutions.** The conference did not reach final agreement and recessed subject to call.

Conferees also met to resolve the differences between the Senate and House passed versions of H.R. 6714, authorizing funds for fiscal year 1978 for **bilateral development assistance** and voluntary contributions to international organizations programs.

New Legislation: In the first session of

the 95th Congress, 162 trade and related bills have been introduced. Those not previously reported in this column include: H.R. 7651, H.R. 8013, H.R. 8032 and H.R. 8169, to amend the Tariff Schedules of the U.S. to repeal **item 807.00**; H.R. 7680, to require that imported **honey and honey products** made in whole or in part of imported honey be labeled "imported," to provide for the inspection of imported honey products, to require that imported honey and honey products comply with certain minimum standards of sanitation; H.R. 7693 and H.R. 8138, to amend the Tariff Schedules of the U.S. to repeal, in the case of **certain wearing apparel and nonrubber footwear**, the special tariff treatment accorded to articles assembled abroad with components produced in the U.S.; H.R. 7712, to apply duty-free treatment, under certain circumstances, to articles produced in the **insular possessions** of the United States.

Also H.R. 7724, to amend the Meat Import Quota Act of 1964 to define **fresh, chilled, and frozen meat**; H.R. 7748, to amend the Tariff Schedules of the U.S. in order to increase the rate of duty on **certain boxes, cases and chests** lined with textile fabrics; H.R. 7790, in regard to the importation and inspection of **certain meat and dairy products**; H.R. 7972, to promote the export of **processed timber products** by progressively limiting the export or sale for export of unprocessed timber from public lands in the western United States; H.R. 8128, to prohibit, with certain exceptions, the importation, manufacture, sale, purchase, transfer, receipt, possession or transportation of **handguns.**

Also, H.R. 8140, to provide for **customs procedural reform**; H.R. 8159, to establish uniform structural requirements for **intermodal cargo containers**, subject to the jurisdiction of the U.S., designed to be transported interchangeably by sea and land carriers, and moving in, or designed to move in, international trade; H.Con. Res. 256, endorsing the efforts of the U.S. Delegation to the Third United Nations Conference on the **Law of the Sea** to achieve a multilateral treaty which assures the right to conduct marine scientific research beyond the territorial sea of any country; H.Con. Res. 270, disapproving the President's action of entering into a marketing agreement with Japan concerning limitations on the importation of **color televisions** into the U.S.

Also, H.J.Res. 510, requiring that any trade agreement between the U.S. and Cuba include a provision preventing disruption of the American **sugar** market; H.Res. 652, relative to the freedom of the citizens of **Romania**; H.Res. 653, disapproving the continuation of the President's authority to waive the freedom of **emigration** requirements for granting of MFN status to Romania; S. 1658, to amend Title II of the Trade Act of 1974 relating to relief from injury by **import competition**; and S.Res. 182, expressing opposition to normalization of U.S. diplomatic relations with **Cuba** until certain preconditions are met.

TREASURY DEPARTMENT

Antidumping Cases: The Treasury Department has announced its final affirmative finding that imports of **pressure sensitive plastic tape** from Italy and West Germany are being sold in this country at less-than-fair value within the meaning of the antidumping law. The case is therefore being referred to the U.S. International Trade Commission (ITC) for an injury determination (see related story below).

Treasury also issued two tentative determinations in antidumping cases. Preliminary findings were made that **saccharin** from Japan is not being sold at less-than-fair value and that **saccharin** from Korea is being sold at less-than-fair value. A six-month withholding of appraisement has been issued for U.S. imports of Korean saccharin.

Countervailing Duty Cases: Treasury has initiated a new investigation to determine whether bounties or grants, within the meaning of the countervailing duty law, are being paid or bestowed on imports of **leather handbags** from Colombia and Uruguay.

Treasury has also announced that countervailing duties currently being assessed on imports of scissors and shears and cotton yarn from Brazil have been reduced. The countervailing duty on **scissors and shears** was changed from 17 to 15.8 percent retroactive to Feb. 11, 1977, and the duty on **cotton yarn** was reduced to 19.6 from 21.4 percent effective June 21, 1977.

THE JUDICIARY

U.S. Steel Corp. v. The United States: On June 28, the U.S. Customs Court denied United States Steel Corporation's motion for leave to file a motion for summary judgment in a suit filed by U.S. Steel against the United States. U.S. Steel is contesting Treasury's refusal to find rebates of certain European indirect taxes to be "bounties or grants" within the meaning of the U.S. countervailing duty law. The issue of countervailability in this case is very similar to that presented in the case of **Zenith Radio Corp v. The United States**, which is now pending in the Court of Customs and Patent Appeals following a Customs Court ruling upholding Zenith's contention that Japanese tax rebates do constitute countervailable subsidies. Trial of the U.S. Steel case is to begin Dec. 5.

COMMERCE DEPARTMENT

Trade Adjustment Assistance for Firms: During the month of June, the Department certified four firms as eligible to apply for trade adjustment assistance, and denied certification of eligibility for one. Firms found to be eligible for assistance in adjusting to import competition are: Daco Manufacturing, Inc., New Bedford, Mass. **(men's and boy's trousers)**; Accessories by Pearl, Inc., New York **(apparel belts)**; Favorite Footwear, Inc., Long Island City, N.Y. **(nonrubber footwear)**; and Carter Leather Goods Co., Inc., New York **(personal leather goods)**. Downen Zier Knits, Inc., in Rockville Centre, N.Y., producer of double knit fabrics was denied eligibility.

License Denial: The Department announced June 23 that it denied the Control Data Corp., Minneapolis, a license to export a Cyber 76 computer to the Soviet Union for use in weather research and forecasting. The reason, according to the Department's Office of Export Administration, is the powerful computer's potential for significant military application and the absence of satisfactory safeguards to detect and prevent diversion of the system to such uses. The decision was reached after extensive consultation with other agencies of government including the Departments of State and Defense and the Energy Research and Development Administration as well as with the company. Normally the Department does not divulge the identity of parties involved in an export licensing action. However, in this case the Control Data Corp. released the Department from its obligation under the law to keep proprietary information confidential.

LABOR DEPARTMENT

Adjustment Assistance Certification: The Labor Department, having found that workers at certain firms have been or may become unemployed as a result of increased imports, has certified workers at those firms as eligible to apply for adjustment assistance. Adjustment Assistance, under the provisions of the Trade Act of 1974, may include cash trade readjustment allowances, training, testing, counseling, job placement, job search grants and relocation allowances.

The workers certified (numbers where available are approximate) are or have been employees of the following firms: U.S. Steel Corp., McKeesport, Pa. (National Works) **(carbon steel pipe and tubing)** 2850; U.S. Steel Corp., Birmingham, Bessemer, and Fairfield, Ala. (Fairfield Works) **(carbon steel structural, plate, and wire products)** 1200; Brown Shoe Co., Houston, Mo., **(women's shoes)** 235; Northwest Steel Rolling Mills, Inc., Seattle and Kent, Wash., **(concrete reinforcing bars)** 150; Fabien Corp., Lodi, N.J. **(printed textiles)** 120; Kenbar Industries, Somerville, N.J. **(electronic testing equipment)** 4; Little Falls Footwear, Inc., St. Johnsville, N.Y. **(slippers and women's casual summer shoes)** 100; Charles Dobbs, Ltd., New York **(men's sports shirts)** 60; Glass Dimensions, Inc., Magnolia, Mass. **(blown glass planters)** 10; Horton and Hubbard Mfg. Corp., Nashua, N.H. **(luggage)** 230; Bata Shoe Co., Inc., Elkins, W. Va. **(athletic**

footwear) 150; Hilo Coast Processing Co., Pepeekeo, Hi. **(sugar products)** 85; C. Brewer and Co., Ltd., Honolulu **(sugar products)** 75.

Also, Ka'u Sugar Co., Pahala, Hi. **(sugar products)** 55; Wailuku Sugar Co., Wailuku, Hi., **(sugar products)** 25; Olokele Sugar Co., Kaumakani, Hi., **(sugar products)** 20; Hawaiian Sugar Co., Hilo, Hi., **(sugar products)** 10; Muench-Kreuzer Candle Corp., Liverpool and Syracuse, N.Y. **(candles)** 250; A and T Ladies Garment Corp., Brooklyn **(women's suits, jackets and coats)** 35; Brewster Finishing Co., Inc., Paterson, N.J. **(printed and dyed textiles)** 200; Central Shoe Mfg. Co., Norwich, Conn. **(men's, boys', children's and infant's shoes)** 90; Faith Shoe Co., Wilkes-Barre and Brooklyn, Pa. **(women's and children's shoes)** 60; Stanley G. Flagg and Co., Stowe, Pa. **(malleable iron pipe fittings)** 50; Armco Steel Corp., Ambridge, Pa. **(seamless steel pipe and couplings)** 910.

Also, Brown Shoe Co., Union City, Tenn. **(children's nonrubber footwear)** 260; Crane Co., Chattanooga, Tenn. **(steel valves)** 140; Beacon, Tex Print, Ltd., Beacon, N.Y. **(printed textiles)** 175; Milady Brassiere and Corset Co., Inc., New York **(brassieres and girdles)** 40; Hull Dye and Print Works, Inc., Derby and Shelton, Ct. **(printed and dyed textiles)** 140; Palmland Fashions, Inc., Miami, Fla. **(men's sports shirts)** 65; Mar Mac Manufacturers, Inc., Baltimore **(women's slacks)** 55; Crest Shoe Co., Inc., Lewiston, Me., **(children's nonrubber footwear)** 30; J. H. Bonck Co., Inc., New Orleans **(men's and boys' woven dress sport and uniform/work shirts, girls' and boys' woven parochial school shirts)** 30.

Also, Gulfway Trawlers, Inc., Port Isabel, Tex. **(shrimp)** 15; Birmingham Stove and Range Co., Birmingham, Ala. **(cast-iron stoves, cooking ware, and fireplace grates)** 390; Kennebec River Pulp and Paper, Inc., Madison, Me. **(groundwood base paper products)** 250; Amboy Mfg. Co., Perth Amboy, N.J. **(girls' coats)** 200; Jersey Dye and Finishing Co., Paterson, N.J. **(printing and finishing of fabric)** 120; Lumured Corp., Woodbridge, N.J. **(beaded handbags)** 40; Riverside Novelty printers, Inc., Paterson, N.J. **(printed fabric)** 30; Saft America, Inc., Metuchen, N.J. **(plate)** 12; International Shoe Co., Belle, Mo. **(women's shoes)** 150; Herman Segall and Co., Philadelphia **(women's blouses)** 60; Halco Industries, Inc., Glendale, Calif. **(eyeglass frames and parts)** 25; and Rockwell International, Harvard and Chicago, Ill. **(color and monochrome televisions)** 600.

Denials: The Department denied petitions for trade adjustment assistance for workers of the following companies: Rohm and Haas North Carolina, Inc., Fayetteville, N.C. **(partially oriented polyester yarn and textured polyester yarn)** 980; Armco Steel Corp., Sand Springs, Okla. (Sand Springs Works) **(fence posts, reinforcing bars)** 900; Republic Steel Corp., Cleveland **(steel products)** 460; Armco Steel Corp., Marion, Ohio (Marion Works) **(concrete reinforcing bars, sign posts, fence posts)** 250; Republic Steel Corp., Buffalo **(carbon and alloy steel bars)** 230; General Electric Co., Syracuse, N.Y. **(vidicon tubes)** 25; Connors Steel Co., Huntington, W.Va. **(steel products)** 100; Laclede Steel Co., Alton, Ill. **(hot rolled carbon steel sheet and strip, carbon steel wire)** 100; Aetna Pipe Products Co., Chicago **(carbon steel tubing, steel pipe nipples)** 35; Edgewater Steel Corp., Oakmont, Pa. **(forged rings, wheels)** 60; Kenosha Metal Products, Inc., Kenosha, Wis. **(capped bumper bolts and stamping for autos)** 5.

Also, Coastal Ice and Fuel, Inc., Brownsville, Tex. **(unloading and servicing of shrimp boats)**; Sea Life Ice and Fuel, Inc., Brownsville, Tex. **(selling of ice and fuel)**; Bethlehem Steel Corp., Chesterton, Ind. (Burns Harbor Plant) **(cold rolled and hot rolled steel sheet, steel plates, tin products)**; Cyclops Corp. (Empire-Detroit Steel Div.), Portsmouth, Ohio **(coke)** 590; Cyclops Corp. (Empire-Detroit Steel Div.), Mansfield, Ohio **(carbon, stainless and silicon steel sheet)** 575; Atwater Throwing Co., Wilkes-Barre and Plymouth, Pa. **(texturized yarn)** 210; Franklin Steel Co., Franklin and Reno, Pa. **(bar-size light shapes, fence posts, sign posts, concrete reinforcing bars)** 30.

Also, Sondra, Inc., Allentown, Pa. **(texturized yarn)** 20; H. W. Gossard Co., Troy, Mo. **(women's sleepwear)** 20; Wohl Shoe Co. (warehouse), St. Louis **(packaging and stocking of footwear)**; Madlin Shrimp Inc., Port Isabel, Tex. **(shrimp)** 6; Joliet Wrought Washer Co., Joliet, Ill. **(washers)**; Cobre Tire Co. and Fletcher Service Co., Butte, Mont. **(distributor of tires, mounting and maintenance services for tires)**; Duraloy Blaw-Knox, Inc., Scottsdale, Pa. **(high alloy steel centrifugal and static castings)** 300; Tube Turns Div. (Chemetron Corp.), Philadelphia **(carbon steel forged flanges)** 260; U.S. Steel Corp., McKees Rock, Pa. **(steel wheels and axles)**; Sanrie Sportswear, Inc., New York **(women's blouses and tops)** 50; Tiffany and Co., Newark, N.J. **(sterling silver flatwear and holloware)** 40; Copperweld Steel Co., Warren, Ohio **(steel).**

Also, O'Keefe Drilling Co., Butte, Mont. **(drilling)**; Hawaiian Tug and Barge Co., Ltd., Honolulu **(interstate water transportation services)**; Young Brothers, Ltd., Honolulu **(inter-island barge service)**; Cardinal Cottons Corp., Coatesville, Gettysburg, and Scottsdale, Pa. and New York **(women's robes and loungewear)** 360; Connors Steel Co., Birmingham, Ala. **(steel products)** 50; Mired Foundations, Inc. (Div. of Lido International, Inc.) New York **(girdles)** 20; Pleasant Beef Co., Inc., Lynn, Mass. **(beef)** 20; Beckerman Shoe Corp., Reading, Pa. **(shoe uppers)** 15; Sheridan AMC/Jeep Inc., Kenosha, Wis. **(sales and service of autos, recreational vehicles, and auto parts)**; Interlake, Inc. Oak Brook, Ill. **(molten iron)**; National Steel Corp., Granite City, Ill. **(hot rolled, cold rolled and galvanized carbon steel products).**

Also, Armco Steel Corp. Ashland, Ky. **(steel products)**; Lever Brothers Co., Edgewater, N.J. **(margarine and shortening)**; Harris Structural Steel Co., Inc., Piscataway, N.J. **(fabricated structural steel)** 150; Michele Dress Co., Philadelphia **(women's and misses' dresses)** 45; Ann Michele Dress Co., Philadelphia **(women's and misses' dresses)**; Peg Bandage, Inc. Las Piedras, P.R. **(elastic bandages)** 35; Hunt for Chevrolets, Inc., Buffalo **(sale and servicing of autos)**; Canteen Corp., Springfield, Ohio **(providing of food services)**; Trimfoot Co., Inc., Farmington, Mo. **(infants' and babies' footwear)**; Jude Trawlers, Inc., Brownsville, Tex. **(shrimp)**; Chippewa Shoe Co. Chippewa Falls, Wis. **(men's footwear)**; and Ameron Steel and Wire Div. of Ameron, Inc., Etiwanda, Calif. **(steel products).**

Investigations: Of the new investigations recently initiated by the Department to determine whether workers at various plants are eligible to apply for adjustment assistance the products most frequently involved are **apparel** and **footwear.**

Export Councils Extended

Continuation of the District Export Council program through June 30, 1979, has been announced by Secretary of Commerce Juanita M. Kreps.

District Export Councils, established in the early 1960s as Regional Export Expansion Councils, consist of business and trade experts, serving without remuneration, who work with the Department's District Offices in stimulating the expansion of exports. The Councils also act as a vital communication link between the Department and the business community in this important undertaking.

At present, there are 42 Councils comprised of approximately 900 members appointed by the Secretary of Commerce.

INTERNATIONAL TRADE COMMISSION

Section 201—Import Relief Cases: The International Trade Commission (ITC) has initiated a new investigation, pursuant to the "escape clause," section 201 of the Trade Act of 1974, to determine whether **bolts, nuts, and large screws of iron or steel** are being imported into the United States in such increased quantities as to cause or threaten serious injury to a domestic industry. A public hearing will be held Oct. 11 at the International Trade Commission Building, 701 E St., NW.,

Washington, D.C. Requests to appear should be received by the ITC Secretary by Oct. 6.

In other import relief action, the ITC has instituted an investigation, following a request from the Special Representative for Trade Negotiations, for the purpose of advising the President as to the probable economic effect on the domestic industry of reducing or eliminating import restrictions on certain **stainless steel and alloy steel.** A hearing will be held in the Commission's Washington Hearing Room at 10 a.m. on Aug. 23. Requests to appear should be received by the ITC Secretary by noon, Aug. 18.

Antidumping Cases: The ITC has announced determinations on the issue of injury in two antidumping cases. The Commission found that no U.S. industry is being or is likely to be injured, within the meaning of the U.S. antidumping law, by sales at less-than-fair value of **round head steel drum plugs** imported from Japan. The Commission's decision terminates the case and no dumping duties will be imposed. The Commission made an affirmative finding of injury, however, in the case involving **swimming pools** from Japan, and additional duties will therefore be assessed.

In addition, the Commission has instituted new investigations to determine whether sales at less-than-fair value of **pressure sensitive plastic tape** from Italy and West Germany are causing injury to a domestic industry. A hearing will be held on July 26 at 10 a.m. in Washington, D.C. at a location to be announced. Requests to appear shall be filed in writing with the Secretary of the ITC by noon, July 21.

Section 332 Investigations: The Commission has instituted two new investigations under the general investigatory authority of section 332 of the Tariff Act of 1930. On its own motion, the ITC instituted a study of conditions of competition in U.S. markets between domestic and foreign **live cattle and meat products.** These products presently are also the subject of an "escape clause" investigation under section 201 of the Trade Act. The last of a series of hearings will be held on Sept. 20 at 10 a.m. in the ITC Washington Hearing Room. Requests to appear should be filed with the Secretary by noon Sept. 15.

The Commission has also begun an investigation, at the request of the Senate Finance Committee, into the impact on the U.S. passenger **automobile** industry of the fuel efficiency tax and rebate proposals contained in the Administration's energy legislation currently being considered by the Congress. The study will also assess the effect of the proposals on the U.S. automobile industry's competitiveness with foreign automobile industries.

Reports: The Commission released its report on **Customs procedures** with respect to the verification of import statistics. The report outlines current procedures governing trade data, and contains certain recommendations for improvement. The report is the first of a series of ITC studies concerning administration and operation of Customs laws.

In addition, the House Ways and Means Committee released the ITC report on the Commission's investigation into the **watch** industry (see **Congress** section).

INTERNATIONAL

Foreign Antidumping Actions: The Canadian government has announced the outcome of the antidumping case regarding acrylic fiber from the United States and Japan. The Anti-Dumping Tribunal found that sales at less-than-fair value of **acrylic tow and sliver and of staple fiber of one and one-half denier and finer** have not, are not and are not likely to cause injury to Canadian production of like goods. The Tribunal determined however that dumping of **staple fiber larger than one and one-half denier up to ten denier,** produced by Monsanto Co. in the U.S. has caused, is causing and is likely to cause material injury.

Foreign Safeguard Actions: The Government of Canada has announced that the global quota on certain **worsted spun acrylic yarns in hanks and skeins** for machine knitting will be maintained at 2.5 million pounds for 1977, the same level as for 1976. Of this quota 90 percent will be allocated to Canadian importers based on their historical performance, while the remaining 10 percent will be reserved for new importers and distributed semiannually.

A 'World Energy Order' Sought By UN's Waldheim

United Nations Secretary General Kurt Waldheim proposes the establishment of an international energy institute to serve as a framework that would lead to "world energy order."

Comparing today's energy problems with the situation which prevailed 30 years ago in the aftermath of World War II, Waldheim said "what is needed is the kind of vision which led to the Marshall Plan."

The Secretary General outlined his views on energy at the University of Pittsburgh recently on the occasion of receiving the George C. Marshall Peace Award. The Award ceremony was part of a day-long visit of Waldheim, 100 permanent representatives to the United Nations and their wives to Pennsylvania. The United Nations Association sponsored the visit to give the UN delegates an opportunity to see more of the United States and its culture than is visible from New York City where they spend most of their time.

"We are all on unproven ground," Waldheim asserted, "but energy, no less than jobs, trade and other resource availability will continue to be a key item on the international agenda for as long as one can foresee."

The Secretary General said his proposed international energy institute should assist all developing countries in the research and development of energy resources.

"It should be evolved within the perspective of future global energy demands and alternative energy sources and technology," he added, "and its work also should reflect growing concern for the protection of the environment and the searching questions now being raised with regard to the nuclear option."

The essential functions of the institute would be:

- Monitoring of resources.
- Analyzing and exchanging information on alternative energy sources.
- Advancing global planning to avoid shortages in the future.
- Orienting research and development toward meeting the requirements of widely differing situations.
- Promoting cooperation between those who have the financial and technological resources and those who do not.
- Assisting in the transfer and adaptation of technology.
- Encouraging development of indigenous or regional energy capacities.
- Training of personnel.

Waldheim added that there is a growing need for new and imaginative conservation measures to "play a major role in helping to alleviate the current problem and to ensure rational worldwide use of energy resources."

The Secretary General said his proposal is to serve mainly as a basis for the nations of the world to begin a unified and cooperative effort geared to the varied and diverse needs of all.

"I do not suggest that agreement and a final plan will be easy to evolve," he continued. "I fully expect that the negotiations will be long and difficult. But we cannot afford to stand still.

"The urgency is underscored by the effect of energy prices on the world economy in general, and on development efforts in the poorer countries in particular. It is equally emphasized by the prospect of worldwide oil shortages from 1985 on, a date around which there appears to be a general consensus. The world—developed and developing countries alike — has no choice but to adjust to this situation and at the same time take constructive action that will help mitigate the adverse effects on the poorer countries."

ELECTRONICS EQUIPMENT IN SWEDISH MARKET: COMPETITION INCREASING

The United States has a dominant role in Sweden's import market for electronics production and test equipment, but competition from European suppliers is increasing. Exhibitors of such equipment at a recent Stockholm U.S. Trade Center show noted that in electronics, although the general technological strength of U.S. products is expected to continue, industry changes are rapid and individual products sometimes become obsolete very quickly. Thus, U.S. suppliers will have to "keep on their toes" if the U.S. share of the Swedish market is to be maintained or increased.

As a whole, the products on display were considered to be competitively priced. Sellers of only a few items, such as capacitors, keyboards, microwave and bandpass filters, and carbide drills mentioned their prices as limiting factors. The majority of products were considered to be technological leaders, or at least competitive.

Among the products reported to have the best potential are various kinds of testers, resistors, memories, programmers, converters, amplifiers, integrated circuits, analog digital components, connectors, floppy disk controllers, and power semiconductors.

Several of the largest Swedish electronic producers are constructing or planning expansion facilities. Also, the Swedish Government is providing financial backing to convert the telephone network to an all-electronic system.

The United States is supplying about 20 percent of Sweden's imports of materials for the electronics industry, 48 percent of production machinery, 23 percent of production tools, 65 percent of testing equipment, and 21 percent of components. In the face of the strong competition from European suppliers, whose technical teams are close at hand, U.S. manufacturers would do well to choose and train agents carefully in Scandinavia.

The show's 23 participants representing 73 exhibitors received visitors from Denmark, Norway, Finland, and several other countries, in addition to almost a thousand from Sweden. Actual sales reported, $226,375; 12-month projections, $6.4 million.

ELECTRONICS IN SWEDEN—*At Stockholm U.S. Trade Center show, Peter Fenner, rear, demonstrates the keyboard control of the components sequencing equipment manufactured by Universal Instruments Corp., Binghamton, N.Y.*

IN MEXICO CITY—*U.S. exhibitor John R. Garland discusses his company's plastic molds with two potential customers at the recent U.S. Trade Center exhibition.*

Mexicans Maintain Keen Interest In Plastics Production Machinery

A recent plastics production machinery and equipment exhibition at the Mexican U.S. Trade Center had the largest attendance of any show ever held in the Center. The previous record event in attendance was also plastics production machinery and equipment (1975), thus demonstrating the strong and continuing Mexican interest in this industry.

Sales were surprisingly good, considering Mexico's severe economic problems. The show featured the products of 28 U.S. manufacturers—fewer than in 1975—and though their floor sales were not of record volume, they totaled more than $275,000. The recent devaluation of the peso has greatly increased the cost of this machinery in local terms; but the participants are looking toward orders in the next 12 months of almost $5.5 million.

Extrusion machinery of more than 4½-inch diameter, large injection machinery, and blowmolding equipment were most popular with the show's trade visitors. Replacement parts, such as screws and barrels, are in high demand as manufacturers try to "make do" with installed equipment. Temperature control instrumentation was of keen interest. Large molds, specialty molds, such as those for automotive parts and air tools and accessories for finishing molds also drew interest. Other popular items included blenders, loaders, dryers, thermoforming equipment, pipe heaters and to a more limited extent, fiberglass foam equipment.

The Mexican plastics industry is marked by competition, so manufacturers are eager to upgrade their equipment. With some exceptions, however, volume handled is lower than in the United States; thus, the best potential is for equipment that is small or medium-sized, so long as it is not manufactured in Mexico.

Although the peso devaluation dis-

courages imports in general, imports from the United States retain the advantages of geographical proximity and shorter delivery times. Price is not considered the major selling point, but Japanese and Italian suppliers frequently can offer less expensive units. Moreover, European suppliers often provide easier credit terms—a factor that currently could be crucial. Brazil and Argentina, which receive LAFTA (Latin American Free Trade Association) preferences for some types of products such as extruders and injectors, are increasingly important in the Mexican market. Technical innovation should assure continuation of the U.S. lead in supplying this market, however—especially as Mexican manufacturers are becoming more conscious of productivity, energy savings, and increasing labor costs.

Plastics production is one of Mexico's most dynamic industries, with many possibilities for expansion. Plastics packaging is highly popular; toys, housewares, and rubber and plastic footwear are other leading products. There is considerable interest in newer uses of plastics, such as in the construction and automotive industries, and in agriculture—for example, drip irrigation and crop protection.

U.S. Firms Invited To Exhibit At Fairs In Dubai, UAE

U.S. firms are invited to participate in a series of exhibitions to be held in Dubai, United Arab Emirates, late this fall and in 1978. The events are being organized by Fairs & Exhibitions Ltd., London. These Middle East exhibitions, as presently scheduled for this fall, are: Construction, Oct. 30-Nov. 5, and Health Care, Nov. 26-30; and for the first quarter of next year, Sport and Leisure Equipment, Jan. 15-22; Furniture and Furnishings, Feb. 5-11; Transport Systems and Equipment, February; Water Treatment and Purification, including sewage systems and water disposal, March.

For additional information, or to apply, contact Fairs & Exhibitions Ltd., 21 Park Square East, Regent's Park, London NW1, 4LH; phone, 01-935-8200; cable, EFANEE London NW1; telex, 21879, EFANEE.

Computer Show, Lausanne

U.S. new-to-market suppliers of computers and peripherals are invited to participate in an exhibition in Lausanne, June 7-10, 1978. The exhibition is to be held in conjunction with the annual meeting of Groupement Romand de L'Informatique (GRI), a professional association of computer end-users in French-speaking Western Switzerland. For information, write: Emil Jucker-Blanc, Secretary General, GRI, Passage Perdonnet 1, P.O. Box 104, 100 Lausanne 4; phone, 021/206858; telex. 24067.

PRINTING IN SINGAPORE—*During the U.S. Trade Center show, much interest centered around booth where AlphaComp photo-typesetter was being demonstrated.*

Recovery In Singapore's Printing Industry Bodes Well For U.S. Equipment Sales

A printing and graphic arts exhibition held recently at the U.S. Trade Center in Singapore came at a time when the Republic's printing industry was recovering from three years of depressed market conditions.

The event, the first of its kind ever held there, was an "unexpected success." The 24 companies exhibiting equipment and materials for the printing and graphic arts industries clinched floor sales totaling $1.25 million; another $4.4 million worth of orders are expected in the next 12 months. Transacted and expected sales were generated from Malaysia and Indonesia as well as Singapore. Among the products on display were the latest in photo-typesetters, film processors, book-stitching machines, saddle binders, process cameras, platemakers, and lighting equipment and accessories.

Attendance at the exhibition — more than 1,700 registered — was second only to the Center's computer exhibition last September. About 15 percent of the visitors came from outside Singapore.

Prior to the show there was speculation in the trade that the printing industry in Singapore would continue to experience poor sales, especially exports by major printing firms. Reservations about the industry's short-term state of health proved unfounded, however. Calls to several of the large and medium size firms in Singapore received encouraging feedback which indicated that the industry was on the verge of an upturn, as overseas orders began to pick up after a period of lull. This view was backed by a Trade Center survey of the industry which pointed to an upsurge in imports of printing and graphic arts equipment over the next four years.

Singapore imports, which dropped from $9 million in 1975 to $5.3 million last year, are expected to recover to around $10 million by 1981.

Sales prospects in other ASEAN (Association of Southeast Asian Nations) countries are also encouraging, particularly in Malaysia and Indonesia.

Trade Center Director George Clausen says that Singapore printers are expected to invest in new and better quality equipment to further enhance their production quality, and competitiveness in the export market. He expects manufacturers of American printing and graphic arts equipment, renowned for their superior quality and technology, to find even better reception as the printing industry's recovery gathers momentum.

VENEZUELA GETS PRIORITY IN U.S. EXPORT EFFORTS

Venezuela is one of the unique markets of the world, according to the U.S. Embassy in Caracas. The government's development policy and economic diversification program, financed from sales of petroleum and the country's substantial foreign exchange reserves, point towards increasing opportunities for American exporters.

Despite the fact that Venezuela's oil production has declined in volume since 1970, the country has enjoyed a high level of income since 1973 as a result of the increase in world oil prices. This situation has resulted in a vigorous increase in Gross Domestic Product at current prices, especially in 1973 and 1974, but only modest real growth. Although production in the extractive industries has suffered significant declines since 1974, the non-extractive sectors have exhibited healthy real growth.

Inflationary pressures show some signs of abating. After enjoying relative price stability in 1968-72, the country experienced double-digit inflation in 1973-74. During 1975 and the first half of 1976 a distinct moderation of the rate of increase in prices took place. Nevertheless, the government remains concerned, and has taken steps to reduce liquidity, restrict credit and alter the price structure.

For the first time in many years, the government experienced a slight budgetary deficit in 1976. The budget for 1977, slightly in deficit, calls for spending at a modestly lower level than 1976, but provides for a significant shift of resources into current expenditures and away from capital investment. In April 1976, Congress authorized large public credits to finance the major public investments of the Fifth National Plan (1976-80).

Venezuela's balance of payments was slightly in deficit in 1976 in part because of heavy outflows related to nationalization of the oil industry in 1976, but also because import payments increased faster than export earnings. This development is not likely to act as a constraint on Venezuela's development plans, in part because the government plans to use substantial amounts of foreign credit and to draw on its reserves of hard currency to finance imports.

The market for a broad spectrum of imports from the United States continues strong. While many trade opportunities are directly related to Venezuela's major projects incorporated in the Fifth National Plan, there is also a host of general trade opportunities resulting from the overall expansion of the economy. A joint U.S. Department of Commerce/Embassy Caracas "Sell in Venezuela" campaign involves (1) extensive market research into every key area of Venezuela's industrial development, (2) construction of an exhibition facility for at least six large-scale U.S. Department of Commerce-sponsored, Embassy-supported, industry-oriented exhibitions over the next two years, and (3) Embassy sponsorship of approximately one dozen smaller-scale specialized trade promotion events, including trade missions, catalog shows, technical sales seminars.

In addition, a Commercial Task Force has been added to the Embassy's personnel complement to develop specific information about major export opportunities, and the companies and agencies of the Government of Venezuela which are generating these opportunities. Highlights of some of the more important projects now in the formative stage are offered below.

Bids are now being evaluated for the billion-dollar railroad project and the Caracas METRO rolling stock and system installation. A billion-dollar "people-mover" project for the Caracas Metropolitan area is under active discussion.

Eastern industrialization

The state-owned agency Corporación Venezolana de Guayana (CVG) has responsibility for promoting and coordinating development of the rapidly-growing Ciudad Guayana region. Designated as the new Eastern pole for Venezuelan industrialization, the region boasts the first national steel mill, CVG-SIDOR, now being expanded from 1.2 to 4.8 million metric-ton annual capacity of steel and product. The expanded plant will utilize the direct reduction process, and both Midrex and HYL processing plants are now under construction. The mill's flat products plant is also being expanded and a slab mill and bar mill are being added. CVG also has an interest in the new FIOR briquetting plant now in its startup phase as well as in the region's two aluminum plants, ALCASA (Reynolds-CVG joint venture) and VENALUM (CVG with Japanese minority participation). ALCASA is currently being expanded to 140,000 metric ton capacity; and VENALUM, now under construction, will raise national aluminum production to 400,000 m.t. per year. INTERALUMINA (CVG-ALUSUISSE joint venture) has firm plans to construct a million-ton capacity facility which will convert imported bauxite to alumina, utilizing the region's natural gas deposits. Also planned for the region are a high-carbon steel plant with 400,000 m.t. annual capacity, a caustic soda plant and a variety of smaller metalworking industries. Rapid expansion has strained local infrastructure, and CVG is sponsoring massive programs for the construction of housing, schools and services.

In his March State of the Nation address, President Perez placed great emphasis on the industrial development of the Zulia region. The CORPOZULIA program now centers on development of large western coal reserves and the creation of a five-million ton integrated steel mill, using blast furnace technology. Expansion of regional infrastructure, including improved highways, port facilities and a short-haul railroad, plus a thermoelectric plant, is also planned.

The development of hydroelectric power is a high government priority. A decision will be taken soon on which of five (including three U.S.) engineering contractors will carry out expansion of the Raúl Leoni (Guri) Dam hydroelectric project. Multimillion-dollar projects are planned for the lower Caroni, Uribante-Caparo, and several other rivers. In addition to the hydroelectric facilities, very large investments will be made in thermal plants and power transmission facilities. Expanded capacity at Guri will speed planned expansion of the aluminum facilities to be built by ALCASA VENALUM and INTERALUMINA.

Development of Venezuela's petrochemical industry has been slowed by the recent government decision to reorganize the National Petrochemical Institute and place it under the control of Petróleos de Venezuela. Little will be done to implement the nation's petrochemical development plans while the reorganization is under way, but implementation of the plan is expected to begin in late 1977 when the reorganization is completed.

There is serious interest in forming at least three mixed enterprises at the El Tablazo petrochemical complex in the near future. Products to be produced are synthetic rubber, high density polyethylene, and polypropylene.

A decision is expected to be made late in 1977 regarding the construction of a benzene-toulene-xylene plant on Paraguaná. It is thought that either LAGOVEN or MARAVEN (operating companies of Petróleos de Venezuela) will be charged with carrying out the project. Several U.S. engineering and consulting companies are now working for IVP to support existing operations. More contracts of this nature may be let in 1977.

Petróleos de Venezuela is embarking on a billion-dollar project to upgrade existing refineries over the next five years. Other areas in which substantial investments will be made over the short and medium term include telecommunications, ports (by a new National Ports Institute which plans a very large integrated port at Puerto Cabello but also needs immediate help in solving critical congestion problems at existing ports), potable water and sewage systems, housing, and shipbuilding. All of these are multimillion-dollar projects and most offer significant opportunities for U.S. suppliers of goods, feasibility and engineering studies, project management, contracting services and capital equipment.

IDLE FUNDS IN NICARAGUA POINT TO SALES OPENINGS

Nicaragua imported more than $160 million worth of American goods and services in 1976, and according to Patricia A. Haigh, Commercial Officer at the U.S. Embassy in Managua, U.S. products should continue to move at a fast pace through at least the first half of 1978.

Nicaraguan export earnings will probably increase by more than $100 million this year, led by the sale of high-priced coffee ($95 million in 1976). It is expected that cotton, the traditional Nicaraguan export leader (with earnings of $129 million in 1976), will lose its top place to coffee for the first time. Sugar, despite depressed prices in the world market, will continue to be a major export ($53 million), as will meat ($38 million) and seafood ($21 million). The next 12 months should also show an increase in imports, and the GDP for 1977 is expected to approach $2.1 billion.

Liquidity is high in Nicaragua, due primarily to the 40 percent increase in export earnings last year. During March, deposits in commercial banks and savings and loan associations had increased 52 percent over those of the same month in 1976, while loans outstanding had increased only 28 percent. There is money to be put to use in Nicaragua. However, most Nicaraguans seem shy about investing or spending this newfound liquidity, and seem content to allow it to remain in the bank for the time being. This idle money presents an opportunity to American exporters.

The agricultural sector is the heart of the Nicaraguan economy, accounting for approximately 24.5 percent of GDP, compared with manufacturing's share of 21.7 percent—and much of the manufacturing industry depends on agricultural inputs. The windfall of increased export earnings fell heavily on this sector and on two large groups within it—coffee exporters whose earnings soared 97.5 percent in 1976 and cotton shippers whose earnings increased 35 percent. Concurrently with this increase in liquidity, the government is implementing a project to increase credit advances to smaller growers with limited financial resources. Due to these factors, Haigh expects that sales of imported insecticides, fertilizers, and seeds will be strong during the next 12 months.

Coffee rust was discovered in Nicaragua in November and since then the Ministry of Agriculture has undertaken an ambitious program to combat its spread. This includes an advertising campaign to encourage all growers to use copper-based fungicides on their healthy trees, which would control, at the same time as preventing the spread of the rust, less serious and previously-ignored pests and plant diseases. The Ministry estimates that a program of preventive spraying can increase coffee production by approximately 20 percent. With the current high prices for coffee, this increase in production should be an added incentive to growers. If they can be convinced of the advantages of preventive spraying, a significant market should develop for copper-based fungicides and backpack sprayers.

Cotton growers are not free from problems either. All the cotton harvested in Nicaragua is ginned there, but much of the harvesting and ginning equipment is old, obsolete, and frequently non-functioning. The quality of the cotton is often actually downgraded by the less than optimum functioning of the machinery. New parts and entire new harvesting machines and gins may be sought by the growers over the next year. The scales that weigh the cotton (both sack and vehicle scales) are also old and sometimes inaccurate. Replacement of these may accelerate during the next year.

Last year's drought affected the harvests of grain and cotton. Grain production dropped 35 percent, while the effect on other crops is still being determined. This interference of nature has caused many growers to contemplate the introduction of irrigation to their fields. Even the smaller growers, aided by credit extension programs of the government, may buy irrigation equipment to protect future harvests.

There is a plan to centralize grain storage facilities, which are presently scattered about the country. In 1978, ten new facilities are scheduled to be built.

In the long run, the government is planning to invest heavily in the agricultural sector. The program includes diversification of crops from the traditional products of cotton, coffee and sugar, into horticulture and products such as fruits, African palm trees, cashew nuts, etc. Also, swine production may be encouraged. Improved technology and a scientific approach to production will be encouraged for all products. In addition to a more diversified product base, Nicaragua would like to develop indigenous processing of its agricultural products, leading eventually to in-country processing of most of its output.

Agro-industry will grow to accompany this planned diversification and upgrading of technology in the agricultural sector. A sure bet is that more food processing machinery will be imported. Specific projects include: a ham and salami plant which would produce a high-quality product for export to the Caribbean area; a cleaning and freezing facility for broccoli, asparagus, green beans, and other vegetables now being planted in the horticulture program; coffee mills to dry and roast the green coffee produced locally; and packaging equipment for processed agricultural products.

Only 5 percent of the cotton grown in Nicaragua is used there, and an increase to 15-20 percent is desired. This would involve the expansion of present facilities as well as construction of new plants. One large textile mill has already ordered new machinery and will start producing indigo denim within the next few months. Another textile plant is being rehabilitated because of fire loss. New plants are being designed which will produce towels, denim, sheets, etc. The market for textile machinery, chemicals and dyes appears good.

In 1978, modernization of the central agricultural markets in various cities around Nicaragua is planned. This would require substantial purchases of refrigeration equipment.

A free trade zone was established last year near Managua's international airport. The 140-acre area provides fully serviced buildings, labor training programs for the local labor force, duty and tax-free

TALKING BUSINESS IN NICARAGUA—*Louisiana's Lt. Governor recently led a group of business executives to Nicaragua to promote trade, investment and tourism. Bob LeBlanc, Exec. Dir., Louisiana Tourist Commission (left), informs Amb. James Theberge (center) of his state's tourism potential as Lt. Gov. James Fitzmorris looks on.*

imports of machinery, tools and spare parts as well as raw materials and semi-processed goods for reexport outside the Central American Common Market, and roll-on roll-off service from Miami, a two-hour flight away.

Consulting and engineering services have a wide-open market in Nicaragua. With a great deal of planning within the agricultural and agro-industrial sectors taking place, Nicaragua will be searching for all types of consulting services and studies — market feasibility, production management, construction and engineering, and general management among them. Nicaragua wants to industrialize, mechanize, and apply advanced technology to its agricultural economy, and will be seeking outside technical and professional advice to aid in its programs.

Nicaragua is a potential market for many other American products and services. Among these are motor vehicles, franchising, health care equipment, pharmaceuticals and communications equipment.

Jamaica Hopes Austerity, Readjustments In Economy Will Carry It Through Crisis

Jamaica is in the throes of an acute economic crisis which will have profound effects on the nation's political and social future. While the parameters of the crisis are known, it is still unclear what remedies will be attempted. Accordingly, a projection of economic trends is clouded by more than the usual degree of uncertainty, notes the U.S. Embassy in Kingston. Nevertheless, there are some conclusions which can be drawn.

First, 1976 was a year of economic disaster:

- Exports fell precipitously, causing a record negative balance of trade. Sugar, alumina and banana exports were hit hardest.
- Jamaica's net foreign exchange reserves fell by $260 million. Gross reserves fell below the levels normally necessary to conduct day-to-day business.
- Inflation was relatively low but government deficits reached record levels, unemployment worsened and production fell.
- Labor relations problems continued to impede production.
- Business confidence was and remains low.

Second, few improvements can be expected in 1977:

- Imports will be restricted to 50 percent of 1975 levels, adversely affecting traditional U.S. suppliers.
- Government deficits will increase, probably triggering inflation.
- Exchange control regulations will increase the cost of doing business and delay payments for imported goods.
- There will be few favorable opportunities for investment.

A substantial decline in tourist arrivals is largely responsible for the foreign exchange problems. Approximately 77 percent of Jamaica's tourists are from the United States and 10 percent from Canada. The number of landed (overnight) tourists grew steadily to 432,000 in 1974. But in 1975 the number dropped to 395,000 and in 1976 it dropped further to 328,000. The decline experienced in 1975 was due primarily to the worldwide economic recession of that year. Subsequent declines have, however, reflected the effect of uncertain internal security, the increased use in Jamaica of Third World rhetoric and allegations of American efforts to "destabilize" Jamaica. These factors, exacerbated by exaggerated press accounts and coupled with a decline in the quality of some tourist services, may keep tourist visits down through the 1977 tourist year.

The Government of Jamaica has proclaimed a policy of "self-reliance" for coming years. The National Production Plan unveiled in April sets the framework for this policy. By the end of 1977 a Five-Year National Plan is expected. In the short term, the government hopes to keep the economy afloat through tight exchange controls, drastic import reductions, and stimulation of production—principally production for export. There are few who expect that these measures will be sufficient. It is expected that before the end of 1977 major foreign assistance including International Monetary Fund support and possible debt rescheduling will be needed.

The IMF support poses a particularly difficult problem for the Government of Jamaica, which believes that traditional IMF prescriptions (devaluation, income policy, reduced government spending) would be incompatible with the government's social programs and objectives. Nevertheless, some mutual accommodation is expected.

Even assuming major IMF and other foreign assistance, 1977 will be a difficult year for Jamaica. A significant drop in consumption and a real drop in the Gross Domestic Product of 10 percent or more can be expected. At best, the problem will include severe economic readjustments and extraordinary austerity; at worst it will mean food shortages and critical social dislocation.

Jamaica's economic crisis will have major consequences on Jamaica/U.S. relations in general and more specifically on U.S. trade and investment.

In 1975 and 1976, the U.S. share of the Jamaican import market was 37 percent. Nevertheless, the drop in imports caused a reduction of $88 million to about $345 million. This figure will drop substantially further in 1977. As a result, many U.S. suppliers will lose their markets entirely, while others may be affected only marginally. The market for consumer goods, particularly luxury items, will be particularly hard hit. On the other hand, agricultural and raw material exports, although likely to be reduced, will fare substantially better. Despite Government of Jamaica efforts to diversify trading contacts, particularly with COMECON and Third World countries, the U.S. share of the reduced market should remain at about previous levels.

Exporters to Jamaica have experienced markedly increased difficulty in obtaining payment in convertible exchange for delivered goods. In many instances these delays can be attributed to cumbersome bureaucratic procedures, or failure of importers to obtain the proper licenses or documents. U.S. exporters should be sure their customers have obtained the necessary import license before shipping goods. Increasingly, exporters should consider doing business on the basis of irrevocable letters of credit rather than on sight drafts or open accounts. The government is giving priority to repayment of public debt over private debt out of its limited foreign exchange reserves. This will cause some delays in securing payment during 1977.

The current financial dilemma affords few trade or investment opportunities. Depending on the level of foreign assistance during 1977, there may develop some opportunities for agricultural exports or even exports of capital goods. The government has announced its intention to proceed during the year with construction of the JAVAMEX alumina plant, although these plans are subject to revision. In this and other projects, the availability of long-term credit will outweigh other factors in Jamaican contract and purchasing decisions.

Relations between the government and the bauxite/alumina companies have improved during the last year. Alcoa, Kaiser and Reynolds have reached agreements with the government for Jamaican participation in their respective operations. Only a dispute with the Revere Corp. remains chronically outstanding.

U.S. investment in Jamaica is at a virtual standstill, owing in large measure to uncertainties over the future of the Jamaican economy as well as some concerns over the government's political direction. The slowdown in general business activity, continued uncertainties, and tight exchange control regulations will probably serve to further discourage private investment through 1977. Investors should consider joint ventures with Jamaican Government participation rather than 100 percent ownership arrangements. Written understandings on repatriation of profits, import license requirements, etc., would also be advisable in this period of tight exchange controls.

HONDURAS SEEMS ASSURED OF ANOTHER GOOD YEAR; TRADE BALANCE IMPROVES

High export earnings and the catalytic effect of large public sector investments should guarantee Honduras another year of continued recovery and sound real growth. U.S. trade prospects will improve as the Honduran economy gains strength in 1977, according to Margaret T. Kromhout, Commercial Officer at the U.S. Embassy in Tegucigalpa.

Honduran Government officials are predicting real growth of 8 percent in 1977, an improvement over the economy's performance in 1976 when GNP grew 6.5 percent. This prediction is based on expectations of reactivated private investment as well as high export earnings and public sector investments. In recent years, private investment has been hesitant, but this attitude is changing. Two sugar mills costing US$37.5 million have already been inaugurated this year. Recent expansion of industrial plants and service industries has created more employment and a better distribution of income. Many private entrepreneurs are planning further expansion or modernization of their businesses.

There was a substantial surge in the value of exports in the first four months of 1977, with coffee, bananas, wood, meat and shrimp leading the way. Though an increase in imports is also evident, it is small compared to the growth of exports. Thus the commercial balance has greatly improved. This also helps to explain the healthy rise in international monetary reserves held by the Central Bank. Reserves reached $180 million by the end of April, 82 percent higher than the ending figure for 1976. These favorable developments in the balance of payments situation should stimulate Hondurans to spend more on imports during the remainder of the year.

U.S. suppliers captured 53.5 percent of the Honduran market in 1976, with sales of $197.2 million. Kromhout believes that American exporters can attain an even greater share of this market, which is expected to grow to over $500 million in 1977. Honduran purchases of chemical products, manufactured articles and transport equipment increased notably last year. Good prospects exist this year for sales of heavy transport and construction equipment, agricultural machinery and supplies, communications and energy systems, and textile machinery and materials.

Major projects planned in the areas of forestry development, hydroelectric power, highway and port construction, communications and agriculture, will provide U.S. suppliers with opportunities for sizable sales, while American engineering, design and consulting firms will find their know-how and technology in great demand.

In 1976, Honduras was the Central American country most favored by loans by the Inter-American Development Bank (IDB). Honduras received $114.5 million from IDB, including $59.5 million for the first phase of the Olancho Forestry Development project. The complete project will cost $439 million and include 249 km. of highways, a new sea port at Puerto Castilla, and an electric power transmission and distribution system. The industrial phase consists of a major pulp and paper plant and three sawmills. In addition to sawmill and pulp/paper mill machinery, purchases will be made in logging equipment, road construction equipment, logging trucks and chip haulers. Initial purchases will be power saws, wheeled skidders, crawler tractors and front-end loaders.

U.S. EQUIPMENT IN HONDURAS—*Economic development in Honduras is being paced by highway and road construction, and U.S. construction equipment is in demand.*

The Government of Honduras, recognizing the importance of a modern and efficient transport network for economic development and national integration, has budgeted large sums for this sector in 1977. Approximately 350 km. of roads are to be built, valued at more than $100 million. If U.S. suppliers maintain their normal market share of 60 percent of heavy construction equipment imports, they can expect sales of over $7 million in 1977. Tractors, haulers, excavators, graders, bulldozers, dredgers, cranes and drilling equipment are needed.

The construction of Puerto Castilla and expansion of San Lorenzo are being financed by the IBRD. An allocation of $4 million is included in the port project to purchase general cargo handling equipment, forklift trucks, mobile cranes, dump trucks, flatbed trailers and pumping equipment to handle molasses.

In September a combined IBRD, IDB and CABEI (Central American Bank for Economic Integration) team will visit Honduras to carry out a final feasibility study of the El Cajon hydroelectric project. If their recommendations are favorable, construction of the El Cajon arch dam should begin in 1978, costing at least $325 million, and providing 500 MW of power when in operation around the mid-1980s. Further investment is planned for needed expansion of the distribution system and electrification of the Aguan Valley, supported by a U.S. AID loan of $10 million.

The Valley of the Aguan River, chosen as a major development site, is one of the richest regions of Honduras and is particularly suited for mechanized farming. Over the next few years, more than $51.5 million will be invested in the second phase of the project. U.S. suppliers can translate Honduran Government plans into practical and important sales opportunities by entering the market now, since virtually no agricultural machinery and equipment is produced in Honduras. Demand will be strong for tractors, cultivators, silos, fertilizers, pesticides and irrigation systems.

A new industrial and commercial free zone located adjacent to the port facilities of Puerto Cortés offers good prospects to foreign investors. The first buildings will be ready for occupancy by September on a contract-lease basis. The Free Zone directors seek firms interested in labor-intensive light manufacturing, packaging, assembling, sorting or other activities considered typical for the free zones.

The official attitude of the Honduran Government is friendly toward private foreign investment. The business community is inclined to view joint ventures or licensing agreements most favorably. Foreigners and foreign-owned companies are accorded the same rights and privileges as nationals. For details on investment incentives offered by the Honduran Government, write the Corporación Nacional de Inversiones, Apartado Postal 703, Tegucigalpa.

Market Study

Marketing in Honduras, an 18-page Overseas Business Report prepared by Walter M. Bastian III of Commerce's Office of International Marketing, reviews opportunities in the market for U.S. suppliers. Copies are available for 50 cents each from any Commerce District Office or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Specify OBR 77-29.

Madagascar's Socialist Policy Discourages Foreign Investors, Hinders Development Activities

The Madagascar economy has shown little or no growth for several years. The government is attempting, with the assistance of international development and lending agencies, to spur economic development, but the emphasis placed on the public sector by its policy of socialism, and widespread nationalizations recently effected in industry and agriculture, have discouraged private investors. While Madagascar's foreign exchange position has improved recently, due to high world prices for its export commodities, much of this foreign exchange will have to be used to import rice due to cyclone damage to domestic crops in early 1977. The final result of these and other factors is expected to be an aggregate economic performance in 1977 largely unchanged from that in 1976, reports the U.S. Embassy in Antananarivo (formerly Tananarive).

A new government and constitution adopted by referendum in late 1975, and subsequent structural changes in the government, appear to have calmed the political situation appreciably over the last two years. Thus, political and economic stability are expected over the next 12 months in this island off the east coast of Africa.

U.S. economic and commercial relations with Madagascar are likely to remain largely unchanged for some time. On the trade side, the balance will probably continue to be lopsided in favor of Madagascar. The United States will, no doubt, continue to purchase Madagascar's coffee, cloves, vanilla and graphite, and as long as prices for coffee, cloves and vanilla remain high, the trade balance will be even more skewed in Madagascar's favor. U.S. sales to Madagascar will likely be confined largely to specialized equipment and machinery not available elsewhere, at least at the same quality.

The government directly controls all imports through the issuance of import licenses. While imports of most consumer goods are severely restricted, importers report that licenses are generally granted for necessary equipment and supplies, especially goods earmarked for development projects.

American export possibilities to Madagascar are hindered by three main factors:

- Traditional economic and commercial ties with Europe, especially France, in spite of the nationalization of several French and European-owned firms.
- Inability of most U.S. firms to do business with potential Madagascar importers in the French language.
- The great distance from the United States, aggravated by the lack of direct shipping services from the United States. All U.S. exports to Madagascar must be transhipped at least once, usually in South Africa, and often a second time in Madagascar itself.

The great advantage held by French and other European firms able to promote their products in the French language cannot be overstated. An increased effort by U.S. exporters to use the French language in their dealings with Madagascar would mitigate the handicaps of tradition, distance and shipping.

Major development projects

The first major foreign private investment in Madagascar since 1972 was announced in May when the IBRD's International Finance Corporation (IFC) led a consortium of foreign government and private investors in the $38 million expansion of a textile mill in Majunga. The IFC is attempting to revive investor confidence in Madagascar, and is reportedly also seriously considering a similar combined investment for the provision of a ferrochrome plant to process Madagascar's chromite deposits. Several U.S. and other Western firms are interested in the ferrochrome plant as a joint venture, and the IFC's possible participation should make this project even more attractive to potential investors.

Power for the ferrochrome plant will be supplied by a $105 million dam to be financed by several international lending agencies, again led by the IBRD. The Canadian Government has loaned $13 million for overall project design and supervision, as well as for the transmission lines themselves, and therefore Canadian firms will provide these goods and services. However, as the IBRD is expected to loan $33 million for the rest of the project, contractors for construction of the dam and suppliers of the turbine generators will presumably be chosen by international tender, probably in 1978 or 1979.

The IBRD is involved in several other existing and planned development projects throughout the country. Interested U.S. consulting and construction firms, and suppliers of capital goods, may obtain up-to-date information from the U.S. Department of Commerce, which receives regular reports from the U.S. Embassy.

In June 1976, the only sizable U.S. private investments in Madagascar were nationalized when the petroleum refining and distribution industry, including the facilities of two U.S. oil companies, was taken over by the government. The history of nationalizations, the provisions of the Charter of Socialist Enterprises, and the requirement for at least 51 percent local ownership, will not make investment in Madagascar attractive to most U.S. firms. However, good investment possibilities may nonetheless exist for U.S. firms able to offer technical, commercial or marketing expertise not otherwise available to Madagascar.

Central African Empire Fits Developing Country Pattern, With Problems, Opportunities

The Central African Empire has rebounded from its economic stagnation of recent years, according to the U.S. Embassy in Bangui. Short-term prospects for continued growth appear good, and the business community is as hopeful as it has been for some time.

The long-run development outlook for the Central African Empire (formerly Central African Republic) is also promising. The nation is blessed with abundant natural resources in the form of rich agricultural land, a tropical rain forest, and mineral deposits. With the help of foreign aid and private investment, several projects for exploitation of these resources are likely to reach fruition within the next few years. These projects include a uranium processing plant at the Bakouma deposits and cotton, coffee, and cattle-herding development. The country enjoys a relatively diversified export base, with cotton, diamonds, coffee and timber each accounting for roughly one-fifth of total export value.

Fundamental obstacles

Despite the current general mood of optimism, there are fundamental obstacles in the path of development. This remains one of the world's least-developed countries, highly dependent upon foreign assistance and vulnerable to climatic vagaries. Serious deficits appear in the government budget and in the foreign current account. Investment projects are hampered at the planning, administrative, and operational stages by an absence of trained personnel, investment capital, and productive infrastructure. River and road networks continue to deteriorate in this sparsely-populated, landlocked country.

Aided by good weather, successful organizational changes, and international price rises for key commodities, agriculture registered impressive gains in 1976. The small industrial sector expanded slowly as several light industries began operations or achieved a more secure base. A large balance of trade deficit in 1975 reversed itself in 1976 to record a slight surplus, per capita income rose by 10 percent in current prices, and investment took place at an increasing rate.

The government continued its direct involvement in the day-to-day management of the nation's economy in 1976. Toward the end of the year, it moved to resolve outstanding economic issues and establish a firmer base for further programs. An ambitious five-year development plan was announced last August. The plan outlines an investment program to improve internal and external communication and marketing networks, exploit human and physical resources, and develop industry and tour-

ism. The plan's full implementation, given the administrative, financial, and foreign aid constraints, is problematic.

A general profile of under-development, along with the language barrier and close ties to France, continue to limit U.S. commercial penetration of this small market. Nonetheless, opportunities exist for more American sales and investment.

The Central African Empire actively seeks foreign investment in priority sectors as a means of promoting economic and social development and lessening traditional dependence on French investors. The investment code is quite liberal and reflects a desire to involve the private sector in industrialization and development of natural resources. The Ministry of Plan, International Cooperation and Statistics and the National Chamber of Industry serve as liaisons between foreign investors and local government agencies and private firms. Investment projects are scrutinized and incentives determined on the basis of contributions to national development. Liberal tax and tariff benefits are available to investors in agribusiness, cattle-ranching, food processing, tourism, manufacturing and assembly, mining and extraction and oil exploration. Investments which create jobs and train local labor are given preference.

The most common form of investment is a joint venture with the government in which foreign investors retain majority and operational control. In these agreements the government can generally be expected to provide tax concessions, land, utilities, and concessionary access to natural resources. The government's record in agreements which require it to provide cash, construction vehicles, housing, and consumable materials has been less satisfactory.

Investment disputes

During the past several years, government investment policies have not always lived up to their principles. The government actions have adversely affected U.S. investment. In May 1974 the petroleum sector was nationalized (including two American subsidiaries) in a dispute over excess profits and credit arrangements. The government acknowledged its obligation to provide compensation, and discussions have progressed near the point of resolution.

In order to mechanize the mining and dredging operations and assist artisanal diggers, SCED was formed in late 1973 by an American company, Diamond Distributors International, the Canadian Mining Company COMINCO, and the government. Legal difficulties arose near the start of 1976.

Although it attained a primary role in diamond production, SCED was unable to reverse an industry-wide decline in production. The government also alleged that SCED had not fulfilled certain social obligations regarding support for diggers and Central African involvement in management. SCED ceased operations in early 1976. Negotiations have been carried out since that point, and an agreement in principle in November provided for resolution of the dispute.

Another problem involving U.S. commercial interests was resolved in early 1977. In connection with General Telephone and Electronic's construction of a microwave telecommunications system, the U.S. Export-Import Bank guaranteed $5.4 million in credits in 1971 and 1975. The government met some payments in early 1975, but none thereafter. Negotiations since that time reached fruition in early 1977 with a formal rescheduling between Eximbank and the government providing for a seven-year repayment term beginning in 1979.

Minimizing the difficulties

In light of these difficulties, potential investors should be certain that all parties to agreements clearly understand the rights, duties, and obligations agreed upon. OPIC's political risk insurance can be issued for direct investment and for engineering and construction projects. An agreement on investment guarantees has been in effect since Jan. 1, 1965, although there is no double taxation treaty. The investment code guarantees free transfer of capital. There are no exchange controls, as the Central African franc is freely convertible into French francs and is guaranteed by France.

The financial institutions in the Central African Empire are not capable of providing adequate financing for major investment projects and negotiations for international financing often last several years. Thus, investors should be certain that external private financing is available for their projects prior to discussions with local firms or the government.

With elimination of the discriminatory tariff against U.S. exports in January 1976, the competitive position of U.S. goods improved considerably. Nonetheless, American goods remain at a disadvantage due to French control of the commercial system, local preferences for French goods, higher shipping charges and less frequent shipping from the United States to Africa. Except in special cases, sales of consumer goods appear to be limited.

Continued expansion in the agricultural sector and the government's desire to expand local processing of raw materials provide an opportunity for the sale of appropriate capital goods. U.S. expertise in tobacco, livestock, cotton, timber, and coffee is respected, and opportunities exist for sales of trucks, fertilizers, insecticides, seeds, agricultural and farm equipment, and processing facilities. American timber handling and construction machinery are already in use. Groundwork for further sales to the forestry sector was laid with a successful Department of Commerce catalog show in January.

As the economy becomes increasingly controlled by state-run companies such as UCCA (cotton purchasing and ginning), ICAT (textiles), ACCF (river transport), Central Hydro (petroleum distribution), and ENERCA (power generation), sales possibilities to these organizations increase commensurately.

Successful penetration of this small market depends upon the ability to do business in French, the official and business language. Firms sending representatives should expect to do business in French. Similarly, all correspondence and documents to be used in local presentations should be translated into French prior to arrival. The average cost for a local interpreter is $50 per day.

Americans are required to have visas to enter the country. Firms intending to send representatives for commercial or investment purposes should notify the Central African Empire's Embassy in Washington in advance.

High Coffee Prices Strengthen Ethiopian Market, But Political Uncertainties Deter Investors

Prospects for economic growth in Ethiopia during the remainder of 1977 appear reasonably good, according to the U.S. Embassy in Addis Ababa. Export opportunities for U.S. products are good to excellent despite changes in the economic system over the past two years and a loosening of the traditional close relations between the United States and Ethiopia. U.S. firms have a good chance of expanding exports to Ethiopia if they are able to offer quality products with competitive prices and service capability. The climate for investment, however, is unfavorable as a result of uncertainty regarding the political situation as well as recent nationalizations and minimal progress on compensation.

During 1976, fundamental political, social and economic changes which started in 1975 were consolidated. Most major industries and all commercial farms were nationalized in 1975 but wholesale and retail trade and small industry have continued in private hands with little government interference. During the past year the government established corporations to run the industries and commercial farms nationalized in 1975. The development strategy of the Ethiopian Provisional Military Government has continued to place emphasis on the rural sector of the economy.

Despite the changes Ethiopia has undergone, the economic performance of the country in 1976 was relatively good. Agricultural production was above 1975 levels

for every major crop except wheat. Manufacturing output remained at approximately the same level as 1975, excluding Eritrea.

The construction industry began to recover toward the end of 1976 after a two-year hiatus. Inflation was high during the first half of 1976 but moderated significantly during the last six months of the year.

The country's foreign exchange reserves at the end of 1976 were nearly US$320 million, a remarkably high level for a third-world nation. The foreign exchange outlook for 1977 is bright because of the high prices for coffee, Ethiopia's major export.

Among products with the highest sales potential in Ethiopia are: farm machinery, communications equipment, textile machinery, aircraft and ground support equipment, road transport equipment, chemicals, fertilizers and business machines.

Private markets for consumer durables and non-durables, including food and clothing, are strong, but U.S. opportunities in these areas (other than high-priced specialty items) may be limited because the Ethiopian market tends to be price rather than quality-conscious for these items.

American goods continue to have a good reputation for quality in all fields and most importers are more than willing to represent U.S. products.

The Ethiopian Government has become the major client in many fields since the nationalization of most major industries. The government relies heavily on tenders to select equipment suppliers. To meet the many technical requirements of such tenders and because the time between announcement of the tender and the close of bidding is often short, the U.S. Embassy strongly recommends that firms desiring to trade with Ethiopia establish an agent relationship with a respected local firm.

Investment: unfavorable climate

In a policy declaration of February 1975, the government stated that foreign private investment was welcome in Ethiopia but that the government would require at least 51 percent interest in major ventures, except minerals exploration and exploitation. In December 1975, however, it announced that contrary to previous statements on the subject, it had decided not to nationalize the foreign oil distribution companies operating in Ethiopia, including the American firm of Mobil Oil. Due to the nationalizations and minimal progress on compensation as well as general uncertainty about the political situation, there have been no new foreign investment starts in Ethiopia during the past year. Included among the thus far uncompensated firms which were nationalized are several U.S. companies.

Calendar For World Traders

July 21—New York—Briefing conference on the new federal tax law and its impact on small business, Long Island Assn. of Commerce & Industry.

Aug. 1—Alcoa, Tenn.—East Tennessee International Commerce Club luncheon meeting, International Trade Mart.

Aug. 4—Memphis—Mid-South Exporters' Roundtable, Monte's Restaurant.

Aug. 10-12—Atlanta—American Management Associations seminar: Multinational Accounting & Finance.

Aug. 22-24—New York—American Management Associations seminar: Fundamentals of Foreign Exchange.

Aug. 22-24—Chicago—American Management Associations seminar: Practice Sessions in Collective Bargaining.

Aug. 25-26—San Francisco—Practising Law Institute's Eighth Annual Institute on International Taxation, Stanford Court Hotel.

Aug. 29-30—New York—Seminar on International Compensation and Related Personnel Practices, World Trade Institute.

INTERNATIONAL BUSINESS REPORTS

The Case for the Multinational Corporation: Six Scholarly Views. Published by the National Chamber Foundation. $4.95 paperback.

Six academic authorities on international business examine questions and criticisms about facets in the operation of multinational corporations. Each treats differing criticisms aimed at the organizations, identifying problems faced and listing potential areas for change. These views are an outgrowth of a national conference on multinational corporations sponsored by the Chamber Foundation, an economic research body.

Write: National Chamber Foundation, 1615 H St. NW., Washington, D.C. 20062.

New Direction for Economic Development in Africa. Published by Africa Books. 222pp. $13.50.

Policies and programs for development in Africa have been influenced by the economic theories of Europe and North America. This publication examines the economic theories that have been transplanted onto Africa and discusses a new course of development. Chapters include: objectives of economic development; relevance of current economic development concepts; economic development theories; economic cooperation for accelerated growth; role of agriculture; diffusion of improved farm technology; agricultural specialization; planning in agricultural development.

Write: UNIPUB, Box 433, Murray Hill Station, New York, N.Y. 10016.

Indonesia: A Survey of U.S. Business Opportunities. Published by the Commerce Department's Domestic and International Business Administration. $4.75.

Indonesia offers U.S. companies a promising market, according to this new study. Indonesian imports of machinery and equipment in 14 economic sectors are expected to total about $13 billion by 1980, nearly double their 1975 level.

Write: Most Commerce District Offices, or U.S. Department of Commerce, FCAT Br. Room 6880, Washington, D.C. 20230.

Political Risks in International Business: Investment Behavior of Multinational Corporations. By Lars H. Thunell. 133pp.

The aim of this study, according to the author, "is to analyze if and if so how the investment decisions of large multinational enterprises are influenced by political events in the potential host country." He examines this relationship in several countries, and offers his conclusions.

Write: Praeger Publishers, 200 Park Ave., New York, N.Y. 10017.

Iran: An Economic Profile. By Jahangir Amuzegar. 280 pp. $12.95.

A record of the rapid growth of Iran and a descriptive account of its current economy. After a brief discussion of the country's basic features and underlying socio-economic structure, the author looks at the various economic sectors and activities. A third section details Iran's national objectives and policies. Finally, the author views the economy's overall performance in light of the national objectives.

Write: The Middle East Institute, 1761 N St., NW., Washington, D.C. 20036.

Catalog of UNESCO Publications. Free.

Lists and describes more than 800 publications of the United Nations Educational, Scientific and Cultural Organization (UNESCO), including such section headings as education, science, culture, mass media and the social sciences. Lists all titles in alphabetical order within their subject areas, and contains alphabetical and series indexes of titles. Included are all UNESCO books, periodicals, scientific maps and slides available from UNIPUB, distributor for UNESCO publications in the United States.

Write: UNIPUB, Box 433, Murray Hill Station, New York, N.Y. 10016.

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about licensing and joint venture proposals, opportunities to sell to foreign enterprises and appoint agents, visits by foreign buyers and officials, and major construction and expansion projects.

Licensing, Investment Abroad

SAUDI ARABIA—Entrepreneur has 2,755 sq. m. of property in prime location in Jidda for development as **high-rise hotel, office or residential building.** Financing of almost all of venture and management would come from a U.S. partner. Mohamed Sabano, P.O. Box 3634, Jidda. P-77841. OPIC.

SAUDI ARABIA — Leading engineering firm seeks joint venture with U.S. contractor **specializing in central air conditioning and electrification.** Saudi company wants to engage in government projects in this field. Has worked on several projects in both government and private sectors. Maintains own work shop, employs 300. Enjoys excellent reputation. Adil Al-Gosaibi, Al-Gosaibi Engineering Corp., P.O. Box 606, Riyadh. WTDR. P-77865. OPIC.

1521, 1522—PORTUGAL—Firm seeks U.S. investor for **housing construction.** Company was first in its country to introduce precast concrete prefabrication. Its current projects under way in Portugal total over $2 million. Potential exists for significant business in Saudi Arabia. Additional information available from Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77827.

1623, 3662—SAUDI ARABIA—Seeks joint ventures with U.S. companies specializing in following: **(1) design, planning, installation, maintenance of petroleum pumping stations; (2) installation, maintenance of petroleum plants and pipe lines; (3) installation, maintenance of microwave telecommunication systems.** Write: M. A. Qaiym, Promotion & Contracting Corp., P.O. Box 5151, Jidda. Telephone, 32479; cable, ALBARARI. P-77846. OPIC.

2024 — AUSTRIA — Firm interested in licensing agreement to establish **industrial ice cream plant** with production capacity of 8 million liters annually. Representative plans to visit U.S. in August. Interested in discussions with ice cream manufacturers; ice cream production machinery manufacturers who have equipped plants in Europe; service companies to coordinate construction and start-up of new plant; and packaging manufacturers. Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77869.

2621—SAUDI ARABIA—Seeks joint venture to establish **paper mill to manufacture newsprint and stationary.** About 1,000-ton-per-month capacity. U.S. participant would design, build, operate facility. Plant could be in Jidda or Asir region where Saudi group is studying possibility of setting up softwood plantation. Mohamed Park, Tahany Corp., P.O. Box 1057, Jidda. Cable, GOODCHANCE Jidda; telephone, 29574; telex, 40115 JDAPHTEL SJ. P-77862. OPIC.

2649—FRANCE—Corrugated paper processor seeks to manufacture **corrugated paper packaging** under license. Established 1919, firm employs 200. Reports annual sales of $14 million. Good reputation. Mr. Sauvaige, Chmn. & Gen. Mgr., Cartonneries De La Lys—1, 3 rue Charles Saint Venant, 59160 Lomme les Lille. Telephone, 92 27 15; telex, 820 471. P-77847.

2843—JAPAN—Seeks exclusive licensing agreement with U.S. firm to **produce surface active agents** for industrial use. Firm prefers new-to-market licensor. Will consider joint venture. Established 60 years ago, firm is medium-size manufacturer of coagulants, carboxy methyl cellulose and various other organic and specialty chemicals. Employs 1,300; 1976 sales, $100 million. Hiroyasu Asaka, Mgr., Research & Planning Div., Daiichi Kogyo Seiyaku Co., Ltd., Senbon-Minami, Shichijo, Shimogyoku, Kyoto 600. Telephone, Kyoto 075-313-5131; telex, 5422-217; cable, DKSK KYOTO. P-77848.

2879 — THAILAND — Seeks joint venture partner(s) for **small or medium size manufacturing enterprise** on 40-acre site. Especially **interested in pesticides**; will consider other products. Arun Sangswangwattana, S. Wattana Ltd., Part. 199/3-5 Prathumwan Circle, Phayathai, Bangkok. P-77842. OPIC.

3079—ITALY—Seeks licenses to manufacture **PVC films for food and technical use** including films that are complexes and coextruded, vacuum and sterilization resistant, frost resistant and heat resistant; also non-polluting films for pharmaceutical use. Established 1954, firm employs 50; annual sales, 1.6 billion lire; sells in EEC, Israel, Hungary. Manufactures extruded PVC blown transparent film for food and technical packaging. F.A.P. Fabbrica Articoli Plastici s.r.l., Via Buozzi 14, 20089 Rozzano (Milano). WTDR. P-77868.

3111—AUSTRIA—Firm interested in importing or producing under licensing arrangement **semi-finished products for ski boot industry.** Laminex Ges.mbH, Postfach 13, Polgarstr. 30, A-1221 Wien. P-77828.

3229, 3641 — INDIA — Seeks technical know-how to manufacture **glass bulbs used in TV picture tubes.** Firm envisages initially to sub-assemble TV glass bulb from imported glass neck, cone and face plates. Proposed facility will be at Bangalore in South India where factory of India's largest TV picture tube producer, Bharat Electronics Ltd., is located. Facility should be capable of producing 250,000 glass bulbs per year. C. C. Dixit, Dep. Mgr., Aviation Div., Greaves Cotton & Co. Ltd., 2 Palace Road. P.B. No. 13, Bangalore 560 052. WTDR. P-77849. OPIC.

3271—AUSTRALIA—Large firm seeks license to manufacture **concrete and lime silica products.** Items of special interest include concrete blocks and bricks, paving bricks and precast building panels for prefabricated housing. Firm is manufacturer, transporter of coal, sand, gravel, premixed concrete. K. C. Campbell, Gen. Mgr., Riverside Coal Transport Co. Pty. Ltd., MacQuarie St., New Farm, 4007, Queensland. WTDR. P-77829.

3291 — ISRAEL — Seeks technical know-how to manufacture at its plant **grinding and cut-off wheels using resinoid bonding** for export to Europe. Firm is currently engaged in manufacture of grinding wheels of up to 20" (500 mm.) diameter, using vitrified bonding. Also produces resinoid bonded grinding and reinforced cutting wheels. Company is in process of expansion and last year installed modern, improved machinery for manufacture of stones and cutting wheels. Yehuda Lupi, Gen. Mgr., Camel Grinding Works Sarid Ltd., Kibbutz Sarid. Telex: 32470 COIN IL. P-77863. OPIC.

3292 — GERMANY — Specialized producer of fire retardant pipe bend sheaths for covering **thermal insulation** seeks joint venture. German company has developed several patented products in **insulation field.** Well equipped, operates own data processing units. U.S. partner would take over sales, distribution; German concern would continue with technical management. Company sells throughout Europe, employs 35. Mr. Muellender, Gernot Muellender GmbH, KG., Isolfix-Isoliermaterial, Industrie Str., D-6973 Boxberg-Schweigern. Telephone, 07930/841; telex, 74 208. WTDR. P-77830.

3295—MEXICO—Owner of land containing **silica sand,** 90% of which appears in its natural form, is seeking joint venture partner who wishes to invest for exploitation of the mineral and provide equipment. Owner wishes to establish plants for manufacture of glass, glass containers and polarized glass. Is willing to send samples and show properties to interested parties. Land has been analyzed. Sr. Luis Velazquez Ortiz, Calle Culiacan 101-304, Mexico 11, D.F. Office: Tehuantepec 86-304, Mexico 7, D.F.; phone, 905-574-3298. P-77831.

3312, 3494 — MEXICO — Buyer sought for plant producing **carbon steel and alloy safety relief valves for petroleum refineries, sugar mills and process industries.** Company established 1973, employs 50. Equipment includes 12 lathes, three drills, one milling machine, hydrotest benches, tooling and molds. Ing Jose Iniguez Sanchez, Industrias Iniguez, S.A., Aptdo. Postal 53-155, Mexico 17, D.F. Telephone: 905-576-2370. P-77832.

3433—GERMANY—Seeks license to produce **solar collectors** to generate warm

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. WTDR request forms may be obtained from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

water for homes and swimming pools. Firm is small manufacturer of aluminum products. Employs 43, has experience in solar techniques. Herr Riedmueller, Mgr., Alu-Bau GmbH, Walkstr. 3, D-7950 Biberach an der Riss. Telephone: 07351/7068. WTDR. P-77833.

3433 — NEW ZEALAND — Fabricator of copper tubing for plumbing industry wants to expand. Seeks license to manufacture **small, solar heating units for household use.** Firm would contribute plant, staff, capital. Plans market heaters throughout New Zealand in cooperation with sister company, a well established plumbing supply house. Ian Ramsey, Dir., Highflow Ltd., P.O. 776, Wellington. P-77834.

3452—GERMANY—Firm is interested in entering into **cooperation agreement for R & D work in fastening elements.** Company has developed comprehensive program for self-locking nuts and fasteners, as well as other components for aircraft, airspace, automotive, conveying equipment, furniture industries. Firm employs 180, including two traveling salesmen, 13 agents. Guenter Mildenberger, Bus. Mgr., SUEKO-SIM GmbH, Sicherheitsmuttern-Verbindungselemente, Postfach 180, D-7187 Schrozberg. Cable, SUEKO; telex, 74210; telephone, 7935/591. WTDR. P-77850.

3452—GERMANY—Consulting enterprise has expressed interest, on behalf of one of its clients, in cross-licensing arrangement with American manufacturer of **screws.** Firm is described as one of leading German manufacturers of speciality screws with labor force of about 200. Karl Mertens, Maerkische Revision Organisation-u. Treuhandgesellschaft mbH, Luedenscheider Str. 32, 5990 Altena. P-77858.

3452 — GERMANY — Leading producer of fasteners, with emphasis on high-tensile hex screws, bolts and nuts seeks cooperation agreement with American manufacturer of **screws, nuts, bolts, other fasteners.** About 60 percent of German firm's output is sold to automotive manufacturers and remaining to construction industry and major retailers in West Germany, other European countries. Wolfgang Sammel, Geramco AG, Peter-Roos-Str. 9, 4000 Duesseldorf. P-77859.

3494—INDIA—Firm seeks technical know-how for manufacturing **buttwelding and socketwelding pipe fittings and forged flanges.** Company has been engaged in engineering, fabricating, erecting pipe for several years; has participated in many of India's national projects. Reports annual sales of around $8 million. A. Bir, Mng. Dir., Stewarts & Lloyds of India Ltd., P.O.B. 270, 41 Chowringhee Road, Calcutta 700071 West Bengal. P-77856. OPIC.

3494 — UNITED KINGDOM — Small manufacturer of precision machine components, press tools, jigs and fixtures, seeks licensing and/or joint venture arrangement to produce products compatible with their facilities and expertise. These could be in light precision field incorporating electrics or pneumatics and could include items such as **valves, pumps, or special machinery.** Company was established 1973, has 44 employees. F. E. King, Mng. Dir., Kefco Precision Engineers (Peterlee) Ltd., 2 & 5-8 Armstrong Road, Peterlee, SR8, 5AE, England. P-77857.

3500—GERMANY—Seeks license to manufacture machinery and equipment for **treatment of bulk materials such as drying, cooling and conveying apparatus.** Firm is small manufacturer primarily engaged in development, construction of machines for chemical and foodstuff industry. Employs 15. Herr Telschig, Mgr., Telschig-Verfahrenstechnik GmbH KG, Postfach 1151, D-7157 Murrhardt. Telephone, 07192/8212; telex, 724 474. WTDR. P-77835.

3540—DENMARK—Large Danish group seeks licenses to produce **machine tools and related products using fractional horsepower motors.** Firm plans to market in Western Europe through its existing sales organization. Motor division presently manufactures motors up to one kw., and grinding machines. Is well equipped, has modern production and assembly line. Also makes transformers, hydraulic cranes, agricultural machinery, pumps and commutators for motors. Employs about 2,300. Representative of firm plans to visit U.S. this summer for discussions with interested American firms. Niels Toft, Gen. Mgr., Fractional Motor Div., Thrige-Titan a/s, Svendborgvej 2, DK-9100 Aalborg. P-77836.

3561, 3562 — FRANCE — Subsidiary of large French Government supported automobile manufacturer Regie Renault seeks licensing arrangement to produce **industrial pumps, hydraulic fluid power pumps, bearings, machine tools, speed changers, power transmission equipment.** Company employs 450. Mr. Counas, Systems & Products Mgr., Seri-Renault Engineering, BP 19, 78390 Bois d'Arcy. Telex, SERQY 695 426 F; telephone, 460 61 70. P-77855.

3569 — GERMANY — Specialized manufacturer of woodworking (veneer) and cardboard processing machinery wants to expand product line. Is interested in licensing agreement to produce **packaging machinery.** Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77870.

3589 — GERMANY — Manufacturer of **commercial coffee making and dishwashing machines** seeks licenses to make similar products. Firm also offers its equipment for license in U.S. German concern makes stamped, pressed, drawn metal products, hydraulic components. Employs 380. Herr Hoenig, Heinkel Apparatebau, Bahnhofstr. 79, D-7064 Remshalden-Grunbach. Telephone, 07151/71041; telex, 07-24354. WTDR. P-77837.

3600—UNITED KINGDOM—Interested in license or joint ventures for manufacture, assembly or commissioning of **plant, machinery and equipment for offshore, petrochemicals, power generation or related industries.** Is specialized controls and systems integration department within one of longest established naval shipyards in U.K. Has many years' experience in combustion, steam, electricity generation, and hydraulic and pneumatic control systems. Have current development interests in inertial positioning systems for offshore oil and gas industry. Much of department's work is high precision engineering for Admiralty and foreign navies. D. S. Allpress, Sales Mgr., Vosper Thorneycroft Ltd., Products Div., Western Road Cosham, Hants, England. P-77838.

3613—HUNGARY—Cooperation partner sought to assist in establishing modern production line for **glass fuses.** Home market of 10-20 miiiion pieces per year. Planned cooperation would involve production, technical development and marketing in third countries. Interested U.S. companies should contact: Intercooperation Co. Ltd., P.O. Box 53, H-1253 Budapest 1, Attila ut. 14. Telephone, 152-220; telex, 22-42-42.

3630—BELGIUM—Seeks license or subcontract to manufacture following: **(1) electric household appliances with special emphasis on thermal systems** (hair driers, mixers, toasters, grills and frying devices); **(2) plastic goods either for domestic or industrial use** (injection molded, thermoplastics); **(3) electric heating units, components or devices for both domestic and industrial uses; (4) electric fans, ventilators, humidifying devices.** Company is part of group consisting of Belgian and Dutch concerns. Can provide well equipped manufacturing facilities with capabilities in metal, chromium and nickel plating, milling, bending works and plastic molding. Ms. Doris Atkind, Trade Promotion Officer, European American Bank, 10 Hanover Sq., New York 10005. P-77866.

3631 — NEW ZEALAND — Small import firm (builders hardware and tools) seeks licensing arrangement to manufacture **camping stoves, lanterns, refrigerators.** Also interested in direct importation of filled consumerized propane canisters. Jack Condon, Dir., Kerr Cowan, P. O. Box 30, Wellington. P-77860.

3652—MEXICO—Seeks licenses to produce **blank recording cassettes** for Mexico, South America markets. Also interested in manufacture of **solar water heaters.** Needs machinery, equipment, technical know-how. Firm currently makes plastic industrial filaments, distributes construction materials. Lic. Hector Sistos Rangel, Constructora De Equipo Industrial y Desarrollo Ingenieria, Maimonides 525-612, Colonia Polanco, Mexico 5, D.F. Telephone: 905-545-1203. P-77864.

3661—HUNGARY—Manufacturer of 10,000 door-telephone sets annually is looking for cooperation partner to adopt his know-how and license for improved production of door phone devices in Hungary. Cooperation desired in the field of production, development and third country marketing. Interested U.S. companies should contact: Intercooperation Co. Ltd., P.O. Box 53, H-

1253 Budapest 1, Attila ut. 14. Telephone, 152-220; telex, 22-42-42.

3679 — AUSTRALIA — Seeks license to manufacture **small communication and electronic devices** for domestic and possibly Pacific markets. Firm's principal products are aircraft and communications equipment, also avionic servicing; wants to expand market. E. De Young, Mgr., Communications Div., Helitrans Corp., Aerodome, Cairns, Queensland. WTDR. P-77839.

3679—ITALY—Large firm seeks licenses to manufacture **electronic connections, switches.** Products would be sold through network of 12 representatives in Italy and 20 agents in other European countries. Company makes electrical and electronic joints; rivets, eyelets and metal hooks; boards for integrated circuits. Has 80 years' experience in metal stamping. Employs around 800, operates modern facility; exports worldwide, good reputation. Ing. Treichler, Gen. Mgr., ZEDAPA Spa., Via G. Gozzi 3, 35100 Padova, Selvazzano Dentro (Padova). P-77840.

3691, 3714— UNITED KINGDOM—Large company seeks license to produce and market **12-v. and 24-v. batteries for automobiles and commercial trucks; and windshield wiper blades for automobiles and all types of commercial vehicles.** In addition, an affiliate is interested in licensing certain of its specialized fasteners in U.S. Main activities of the British group are manufacture and sale of vehicle suspension units, other automotive parts and industrial fastenings. Group has 3,268 employees and seven overseas subsidiaries. W. D. Jenkins, Mkt. Planning Mgr., Armstrong Equipment Ltd., Gibson Lane, Melton, North Ferriby, North Humberside HU14 3HY, England. P-77851.

3714 — UNITED KINGDOM — Seeks licenses to produce **pollution control devices, with emphasis on automotive and other transportation related emissions.** Company manufactures dump trucks, industrial gas turbines and gas, steam and turbocharger blades. Employs 1,000; operates three modern, well equipped plants. J. White, Senior Project Engineer, Centrax Ltd., Shaldon Road, Newton Abbot, Devon TW12 5SQ, England. P-77843.

3811—GERMANY—Desires to enter into cooperation agreement for production, distribution of **laboratory equipment** in Europe. Company would produce glass parts of equipment; metal parts to be produced by American partner (e.g. vacuum rotary evaporizers). Firm currently manufactures special laboratory glassware, operates well established distribution network. Established 1958. Wolfgang Morawietz, Hans-Udo Winzer Laborglas-Technik. Ferinand-Friedrich- Str. 7, D-6980 Wertheim 2. Telephone, 9342/8211; telex, 689 150. WTDR. P-77852.

3861—HUNGARY—Cooperation in the photocopier field, magnetic brush or liquid reversal process, desired. Would like to produce copier that would provide continuous copying of 300 mm. roll of paper with an arzenous selenite cylinder of 242.5 mm. diameter with copy speeds of 330 and 660 mm./sec. Having secured the right to develop or modify partner's process or machine, the Hungarian company is prepared to buy production rights. Eventually cooperation in production, development and marketing is desired. Interested U.S. companies should contact: Intercooperation Co. Ltd., P.O. Box 53, H-1253 Budapest 1, Attila ut. 14. Telephone, 152-220; telex, 22-42-42.

3991—FRANCE—Seeks joint venture or licensing agreement with American firm to produce **disposable cups and toothbrushes** which can be used in automatic vending machines. Has U.S. patent. Andre Taddei, 6 rue Dulau, 13200 Arles. Telephone: 90/96 05 46. P-77861.

4214—YEMEN—Moving and storage company is seeking joint venture relationship with U.S. **moving and packing firm.** Yemen concern was established April 1977, has completed 15 jobs to date; presently has 6 contracts. Company requires managerial and operational expertise in addition to supply of packaging and crating material and related equipment. Ali Shakyh Mohammed, Yemen Express, P. O. Box 672, San'a. Telex, 233NCR; cable, YEEMEX. P-77853. OPIC.

7394 — MALAYSIA — Seeks joint venture with American leasing company specializing in **heavy construction equipment and other industrial machinery.** Malaysian firm operates as sales and independent agent handling minicomputer and peripheral equipment, quarry and mining machinery, generators and marine supplies. Also extends credit loans for equipment purchases. Ang Swee Tong, Gen. Mgr., Sri Kinabaluu Sendirian Berhad, Suite A1203 Fitzpatrick's Bldg., 86 Jalan Raja Chuulan, Kuala Lumpur. WTDR. P-77844. OPIC.

8911—GERMANY—Well established firm engaged in **design, construction and installation of electrical outlays** for large industrial plants seeks joint venture. Wants to cooperate with U.S. company in similar field with newly developed **electro-technical or electronic systems.** Initially, German firm would be interested in marketing agreement for Europe. Company presently maintains 13 engineering offices throughout Germany; employs 500 to 1,000, depending on size of projects on hand. Write: U.S. Con. Gen., Economic/Commercial Section, File #13, Cecilienallee 5, 4000 Duesseldorf 30. P-77867.

8911—SAUDI ARABIA—Seeks joint venture arrangement with U.S. firm to establish **aerial survey company.** American company should be capable of undertaking geodesical aerial surveys. Saudi firm is well established land surveyor, operating 25 crews. Write: Jack Baker, Consultant, Prestige Int'l., 5003 24th St., Sacramento, Calif. 95822. Telephone: 916-452-5691. Copies of correspondence should be sent to Marketing Advisor, U.S. Con. Gen. APO New York 09616, and marked for attention of FAMCO Mng. Dir. S. K. Soghikian. P-77854. OPIC.

Important Notice

Most member countries of the League of Arab States employ a secondary boycott against foreign firms which undertake certain specific types of business relationships with the State of Israel. The Commerce Department will not disseminate nor make available for inspection any tenders or trade opportunity documents which contain conditions intended to support such boycotts, or which are based on documents known to contain such provisions. Trade or investment opportunities published herein are not presently known to be subject to such conditions. However, it is possible that U.S. firms responding to opportunities from Arab countries may be asked at some stage of a transaction to participate in an Arab boycott-related restrictive trade practice as defined in the Department's Export Administration Regulations (15 CFR, Part 369 et. seq.).

Firms are reminded that it is the policy of the United States (a) to oppose restrictive trade practices or boycotts fostered or imposed by foreign countries against other countries friendly to the United States, and (b) to encourage and request U.S. concerns engaged in the export of articles, materials, supplies, or information to refuse to take any action including the furnishing of information or the signing of agreements, which has the effect of furthering or supporting such restrictive trade practices or boycotts. Accordingly, U.S. concerns receiving such requests to participate in a restrictive trade practice or boycott are encouraged and requested to refuse to comply with them.

Firms are further reminded that U.S. concerns receiving requests to participate in a restrictive trade practice or boycott must report such request to the Department of Commerce in accordance with Section 369.4 of the above-cited regulations.

Licensing In U.S.

For additional information on these opportunities to manufacture foreign firms' products in the United States under an investment, joint venture, licensing, or representation agreement, write to the Domestic Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-377-5361), referring to the appropriate file number.

Representatives of all **Austrian** *firms listed below will be in the U.S. Oct. 17-21.*

Joint venture

AUSTRIA—Hinges for eyeglass frames. Redtenbacher Werke, A-4644 Scharnstein. File 3480.

AUSTRIA—Wood and coal burning stove for log cabins. Company wants U.S. firm to assemble. Tirolia-Werke, Jos. Heiss & Co. Kdt. Ges., P.O. Box 99, A-6130 Schwaz. File 3481.

AUSTRIA—Rifles and shotguns. Voere GmbH, P.O. Box 52, A-6330 Kufstein. File 3482.

AUSTRIA—Farm machinery. Hay harvester, plows, silo unloaders, harrow teeth. Vogel & Noot Ag, A-8661 Wartberg/Stmk. File 3483.

AUSTRIA—Electric radiator. Vogel & Noot Ag, A-8661 Wartberg/Stmk. File 3484.

FRANCE—Disposable cup and toothbrush which can be marketed by automatic vending machines. U.S. Patent No. 3,880,281. French company seeks joint venture or cross licensing. Andre Taddei, 6 rue Dulau, 13200 Aries. File 3485.

GERMANY — Casings, housings, knobs, and other plastic parts for electrical appliances and automotive applications. German firm employs 400, performs own tool and die work. U.S. partner would be firm employing 50-150, with plastic fabrication including injection molding experience, pattern of deliveries to electrical and appliance industries, and would have its own

machine shop. Hans G. Werm, Dipl.-Met., 6000 Frankfurt/Main-70. File 3486.

GERMANY—Aluminum and plastic roll-down shutters. Small German firm produces roll-down type exterior shutters, jalousies, marquees, and window and door frames, specializes in selling direct to home owners for home improvement projects. Shutters are resistant to sun and corrosion. U.S. partner would be small-to-medium size firm, generally in like manufacture. German firm is in position to supply technology, marketing and service skills, and components from Germany for full or partial assembly in U.S. Lothar Will, Verkaufsbuero der Hoffmann KG, Am Haufensteinberg 1, 6101 Brensbach 4. File 3487.

GERMANY—Investment castings, precision castings. Company is interested in finding U.S. partner in similar production, who would consider discussing possibility of cooperation, partnership. Firm employs 75, with 10 sales representatives. Sales of DM 4 million. Commercial Section, U.S. Con. Gen., Urbanstr. 7, D-7000 Stuttgart. File 3488.

Licensing

AUSTRALIA — RF protector for signal generators. Device is unique, and completely portable AC/DC at very low cost. Can be built for about a tenth of cost of similar devices. E. De Young, Mgr., Communications Div., Helitrans Corp., Aerodrome, Cairns, Queensland. File 3489.

AUSTRALIA—"Pillows of tomorrow", a unique, patented pillow. Firm wishes negotiable lump sum payment plus 5% royalty. J. A. Zaghini, Mgr., Bellacomfort Products, Box 945, Ingham, Queensland, 4850. File 3490.

AUSTRIA — Plastic containers, injection and blow molded for pharmaceutical, chemical, food, toiletries, cosmetic industries; plastic cases for battery industry; plastic tubes. Tuwa Plastik, Dr. Herbert Warnecke GmbH, Dampfmuehlgasse 5, A-1111 Vienna. File 3491.

BELGIUM—Aluminum trolleys which convert to stepladders or workbenches. Doris Atkind, Trade Promotion Officer, European American Bank & Trust Co./Banking Corp., 10 Hanover Sq., New York 10015. File 3492.

CANADA—Safety pressure switches used on oilfield pumps and pipelines. Company is looking for manufacturer to build and market these testers in U.S. and/or Canada. Will consider either cash license fee plus royalties on each unit, or an outright sale of Canadian patent 1,001,715 for cash. Harold F. Watson, P.O. Box 997, Olds. Alberta, TOM 1PO. File 3493.

FRANCE—Modular construction of homes, utilizing new procedure. Doris Atkind, Trade Promotion Officer, European American Bank & Trust Co./Banking Corp., 10 Hanover Sq., New York 10015. File 3494.

GERMANY—Plastic high speed ski and ski-bob coating. Coating is combination of polymeric resins, which is highly resistant to extreme high and low temperatures that leads to fast gliding effects under cold and dry snow conditions as well as when snow is moist or wet. Herbert Costenoble, Fuchsbichlweg 7, D-8200 Rosenheim. File 3495.

GERMANY — Weighing platforms for weighing trucks and other; wide range of capacities, sizes, types of platforms. Well established principle of gyroscope applied to modern weighing techniques. The gyroscope sends series of impulses directly proportional to the weight and this is indicated in digital form. Printer of system provides up to ten copies. Josef Woehrl, WOEHWA-Waagenbau, Postfach 7, D-7941/3055-56. File 3496.

GERMANY—Drive belts, variable speed, adjustable speed. Company established 1956; employs 800, has annual sales of DM 65 million. Commercial Section, U.S. Con. Gen., Urbanstr. 7, D-7000 Stuttgart 1. File 3497.

GERMANY—Specialty screws. Company is a leading German manufacturer, with labor force of about 200. Karl Mertens, Maerkische Revision Organisation-u. Treuhandgesellschaft mbH, Luedenscheider Str. 32, 5990 Altena. File 3498.

GERMANY—Toupee, patented, new in structure and method of securing on human head. R. A. Wilhelm Boeckmann, Tup-On Haarkosmetik Int'l, GmbH, Klosterstr. 4-5, 4400 Muenster. File 3499.

GERMANY — Concrete and/or plastic bound slab press for slabs of terrazzo, travertine, other materials. Press may be converted from small equipment to fully automatic by adding components. Slab sizes from 500 x 1,250 mm. to 600 x 1,300 mm. System is economical, labor saving, does not offer storage problems. U.S. Patent No. 3,920,369. Paul Boehringer, Pres., Boehringer GmbH, P.O. Box 19, D-7101 Oedheim bei Heilbronn. File 3500.

ISRAEL—Lifting device for handling wall slabs, containers, by single-point lifting apparatus. Device is not supplied with power unit, no connection to external power source is required. It operates by closed loop hydraulic pressure which is built up by load forces acting upon pump unit. Pressurized oil is directed via selector valve to bi-directional hydraulic cylinder which causes the necessary longitudinal shifting. Itzhak Zilberman, Consulting Engineer, 26/29 Livorno St., Bat Yam. File 3501.

ITALY—Smoke and gas purification based on wet system. Features and advantages are high dedusting efficiency (over 99.5%), total elimination of toxic gases, minimum energy and water consumption, low maintenance costs, totally automatic control, minimum space requirement and low investment costs. U.S. Patent No. 3,988,421. Runci Letterio, Tecnochim S.R.L., Corso Indipendenza 6,20129 Milan. File 3502.

NETHERLANDS — "Aerobelt", air belt conveyors for bulk transport. Derives its name from the film of air maintained between the belt and the tubular closed frame. It has no carrier rollers. Roy T.S. Gilhuys, Commercial Secretary, The Netherlands Chamber of Commerce in the U.S., Inc., One Rockefeller Plaza, New York, NY 10020. File 3503.

USSR—Thermodiffusion. New method of case-hardening cutting blades of items such as sheep shearing devices, segments and inserts of harvesting machines and other thin-blade working members of farm machinery. V/O Licensintorg, 31 Kakhovka St., Moscow M-461, 113461. File 3504.

USSR — MHD flowmeters. U.S. patented system of appliances used in instruments for determining quality of final product of technological processes operating in closed air-tight space, when quality depends on accuracy of component proportioning, agitation rate and similar conditions. V/O Licensintorg, address above. File 3505.

USSR—Polycrystalline cubic boron nitride. New superhard tool material capable of sustaining high mechanical and thermal stresses produced at high cutting speeds. V/O Licensintorg, address above. File 3506.

USSR — Polymer stabilizers. Patented method prevents thermo-oxidizing reduction of variety of polymers, process does not require an intricate flow sheet, is economical; requires no special equipment; takes place under atmospheric pressure and at room or elevated temperatures; is effluent free and utilizes all its by-products. V/O Licensintorg, address above. File 3507.

USSR—Purification of sulfur from arsenic. Method eliminates formation of arsenic-containing solutions and dispenses with problems of effluent discharge and costly decontamination. U.S. Patent No. 3,687,-628. V/O Licensintorg, address above. File 3508.

USSR—Explosion-welding of metal pipes used for jointing aluminum sheathing of electric cables in erection of small power transmission lines. Can be used in field, as well as inside premises of communications facilities. V/O Licensintorg, address above. File 3509.

USSR — "Elektronarkon." Apparatus designed for use in diverse fields of clinical medicine for treatment of functional disorders of central nervous system. Intended for electrotranquilization and electroanalgesia. V/O Licensintorg, address above. File 3510.

USSR—Plasma-arc remelting of consumable metal bar. Technique of improving quality of metals and alloys where plasma arc is used as source of heat. V/O Licensintorg, address above. File 3511.

USSR—Antifriction graphite-plastic self-lubricating materials, suitable for manufacture of parts of friction subassemblies that operate without lubrication and for manufacture of parts for operation in water, kerosene, lubricating oils and liquid oxygen. Materials manufactured with use of new heat-resistant binder. V/O Licensintorg, address above. File 3512.

USSR—Flux, type of molten low-silicon highly oxidizing, for welding high-alloy austenitic steels. V/O Licensintorg, address above. File 3513.

SWITZERLAND — Water ozonating systems for residential and medium sized commercial and industrial applications. Equipment is manufactured as compact units, producing ozone from surrounding air. System is free of metallic ions which allows equipment to be used in medical and food fields (odorless water desinfection). There is no galvanic decomposition in ozone tube. Units have capacities of up to 72 grams of zone production per hour, about 6 grams being required for desinfection of one cu. m. of water. Reported to require minimum maintenance. J. Ulmer, Marian Ag, Steigstr. 1632, 9444 Diepoldsau. File 3514.

UNITED KINGDOM—Specialized fasteners. Door closers and bushes, studs and threads. W. D. Jenkins, Mkt. Planning Mgr., Armstrong Equipment Ltd., Gibson Lane, Melton, North Ferriby, North Humberside HU14 3HY. File 3515.

Licensing in U.S./abroad

AUSTRIA — Hospital beds and bedside tables/cabinets. Joh. Bukowansky, Metallmoebel- und Drahtgitterfabrik GmbH, Wiener Str. 131, A-4020 Linz. File 3516.

AUSTRIA—Special locking systems. Masterkey, security locks, cylinder-padlocks, rim locks, others. Evva Werk GmbH, KG, Wienerbergstr. 63, A-1120 Vienna. File 3517.

AUSTRIA—Cream whippers and thermo-

syphon for kitchen. ISI Metallwarenfabrik, Kuerschnergasse 4, A-1210 Vienna. File 3518.

AUSTRIA—Special curved roofing system for warehouses, railway stations, garages. Para Metallfertigbauteile GmbH, Linzer Str. 22, A-4070 Eferding. File 3519.

AUSTRIA—Ski lifts, other metal fabrications. Traunsteinwerkstaetten, Joseph Swoboda, A-4664 Oberweis. File 3520.

U.S. representation

AUSTRIA—Boilers. Storage water heater with high-capacity heating element. **Hot water tanks** with high-capacity heating element. Austria Email Ag, P.O. Box 111, A-1171 Vienna. File 3521.

West Berlin Wants To Buy Hospital Equipment, Supplies

The West Berlin City Government is planning a wide-scale consolidation of the city-run hospital network. Offers from American suppliers of hospital equipment and supplies are welcome. Interested firms should contact Prof. D. Niels Diederich, Project Team Leader, Berliner Senat, Potsdamer Str. 65, D-1000 Berlin 30. P-77826.

Thailand Seeks Investors For New Tin Smelting Plants

The Royal Thai Government has announced that it will accept applications to expand the country's tin smelting capacity from firms who can qualify and which meet the following conditions:

(1) Applicant must possess sufficient investment capital; (2) he will be governed by same procedures and regulations now being observed by existing tin smelting plants in Thailand and as prescribed or will be periodically prescribed by Mineral Resources Department; (3) a majority of administrative and technical staffs of proposed plant must be Thais; (4) proposed plant is to have monthly production capacity of 30 tons for domestic markets or 250 to 300 tons for combined domestic and export markets; (5) refined tin is to have purity of 99.8 percent with maximum waste of two percent; (6) construction of plant is to be complete and operational within two years following approval; and (7) plant is to purchase tin ore for its inventories from local mining operators.

Interested investors should contact Charu-Udom Ruangsuvan, Dir., Mining Concession Div., Mineral Resource Dept., Ministry of Industry, Rama 6 Road, Bangkok 4. Phone: 281-6081. U.S. investments in Thailand may qualify for OPIC insurance coverage. P-77845.

The following trade opportunities are based on reports received from the U.S. Foreign Service—Department of State by the Trade Opportunities Program, Room 2323, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest indicated by codes 0111-1799 and 4011-8999 are based on the Standard Industrial Classification Manual, 1972; codes 20 through 39 come from Numerical List of Manufactured Products (New 1972 SIC Basis), MC72-1, 2. Codes beginning with 99 are from the TOP coding system.

U.S. firms should be aware that the listing in Commerce America *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Department's Export Administration Regulations. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency.

Direct Sales

Glass, glassware

3221017/34—SINGAPORE—Perfume glass bottles of following sizes—A. ⅛, ¼, ½, 1 & 2 oz.; B. ¼, ½, 1 & 2 oz. atomizers. Mfr. of perfumes & colognes, interested in contacting U.S. suppliers of perfume bottles. Wtdr 6/8/77. Reply to—Dr. Dadi Balsara, Mng. Dir., Perfumes of Singapore (PTE) Ltd., 173-A Goldhill Shopping Center, Thompson's Rd., Singapore 11. Cable, PERFUMES, SINGAPORE; Tel. 2522252.

Steel mill products

3315223, 3634369—ITALY—Staples (steel wire), estimated value $3,000. Also, electric irons for heat-sensitive papers (used in apparel industry), est. value $2,000. Machinery, equip. & access. for apparel mfg. industry (non-electric stapling machines & staples), electric irons for heat-sensitive papers, pattern cutting machines, fabrics, cutting machines, labeling & marking devices, chalk, special paper & paperboards to make clothing patterns), total value $92,000, sought by reliable importer, distrib. Quote c.i.f. Leghorn. Deals in packaging machinery. Desires to begin selling other lines of equip. used in clothing mfg. field. Located in town of Empoli, near Florence, town specializing in mfg. of outerwear, ready-to-wear raincoats, overcoats, etc. Estab. 1971, employs 12 & has 5 sales reps. Sells Italian & EEC products to wearing apparel mfrs. throughout Italy. Annual business volume stated over $1 million & expected to increase in future years. Banking sources report regular business turnover, is expanding, has adequate financial means, follows good business ethics & deserves good credit rating. Reply to—Silvano Toti, Owner, Imballaggio-Technoconf, Via S. Martino A Pontorme 1/A, 5005 Empoli (Firenze). Tel. 0571/73020.

Nonferrous metals, rolled & drawn

3356971—HONDURAS—Zinc sheets or shapes, caliber 29, 26" width, striated. Firm wants to receive offers asap, c.i.f. La Ceiba against L/C, incl. catalogs, price lists, terms of delivery, etc. Enjoys excellent reputation in local banking & commercial circles. Offers by cable requested. Reply to—Sr. J. Antonio Merren, Mgr. & Owner, Casa Merren, Ave. La Republica Y 7A. Calle, La Ceiba, Atlantida. Cable MERREN; tel. 420635.

3362061—HONDURAS—Bronze art & houseware goods, such as lamp bases, decorative items, bronzeware, etc. Firm wants to receive offers asap, c.i.f. La Ceiba against L/C, incl. catalogs, price lists, terms of delivery, etc. Reply to—Sr. J. Antonio Merren, Mgr. & Owner, Casa Merren, Ave. La Republica Y 7A. Calle, La Ceiba, Atlantida. Cable MERREN; tel. 420635.

General industrial machinery

3569126—GERMANY—Labeling machines. Quote c.i.f. Estab. 1885, employs 150, turnover about dm 10 million annually. Financial ref: Mainzer Volksbank, Mainz. Reply by fastest means to—Herr Adolf Sontag, Adolf Sontag KG, Postfach 6501, Nieder-Olm/Mainz. Cable: PAPIERSONTAG; Tel: 06136/444; Tx: 04187212.

Cinematographic equipment

● **3679001—SRI LANKA**—Government invites tenders to supply 1,000,000 feet of 35 mm. magnetic sound recording film to State Film Corporation, 1,000 feet per reel. Closing date Aug. 19. Tender documents may be obtained from: Embassy of Sri Lanka, 2148 Wyoming Ave., NW., Washington, D.C. 20008; Attn: A. S. Nadaraja, First Secretary (Commercial); tel. 202-483-4025.

Medical equipment

● **3693000, 3861900—SRI LANKA**—Tenders invited by government to supply X-ray equipment with accessories to Department of Health. Three full units desired, with two double-focus rotating anode X-ray tubes, suitable for general radiography, tomography, fluoroscopy and spot filming. As well, three half X-ray units are desired, with one cover couch X-ray tube each. Closing date for bids Aug. 9. Tender documents available from: Embassy of Sri Lanka, 2148 Wyoming Ave., NW., Washington, D.C. 20008; Attn: A. S. Nadaraja, First Secretary (Commercial); tel. 202-483-4025.

● **3842120—SRI LANKA**—Government invites tenders to supply elastic adhesive bandages to the Department of Health; bid deadline Sept. 6. Total of 17,300 dozen spools of bandages and plaster required in following areas: elastic adhesive bandages, crepe bandages, zinc oxide self-adhesive plaster, and extension plaster. Tender documents may be obtained from: Embassy of Sri Lanka, 2148 Wyoming Ave., NW., Washington, D.C. 20008; Attn: A. S. Nadaraja, First Secretary (Commercial); tel. 202-483-4025.

Photographic equipment, supplies

3861557—GERMANY—Amateur type roll film (Kodak, or equal, super 8). Large discount retail chain, estab. 1948, employs 5,600 & reports annual sales of DM 1.3 billion. Reply to—Ludwig Kipp, Jr., Alfred Massa GmbH, Friedrichstrasse 15, 6508 Alzey. Tel. 06731-8401; telex 42427.

Textiles, scrap

9997—ITALY—Polyester doubleknit cuttings ($1 million), acrylic clips ($800,000), texturized polyester spinning & weaving remnants ($90,000), acrylic sweater clips ($100,000). All sorted to colors. Sought for own use by mfr. of blankets & apparel fabrics from recovered fibers. Quote c.i.f. Leghorn, Italy. Medium-sized reliable partnership, located in Prato Textile Center, employs 350 & has 12 reps. Annual business volume reported to be $10 million. Blankets (1.5 million pieces produced/year) as well as apparel fabrics exported to EEC, U.S., African & Asian countries. Reply to—Vincenzo Cecconi, Partner, Lanificio Fratelli Cecconi, Via Delle Fonti 370, 50047 Prato (Firenze). Cable: CECCONITEX PRATO; Tel: 0574/591841; Telex: 58145 CECCONI.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Anthracite

1111—SWEDEN—Anthracite (hard coal) to be used as filter for water purification. Medium-sized agent/distrib. of industrial chemicals. Has share capital of skr 500 thousand & annual turnover approx. skr 43 million. Warehouses in Vasteras, Norrkoping & Falkenberg; & branch offices at Karlstad Sundsvall. Recommended trade contact. Reply to—Kjell Claesson, AB CDM, Box 2082, S-403 12 Goteborg. Cable CEDEMOBEL; Telex 20777 CDM S; Tel. 031/17 83 20.

Cutlery, hand tools, hardware

3421121 — SWEDEN — Kitchen cutlery. Small co., well-established, financially sound & has met payments promptly. Customers are wholesalers, dept. stores, catering services & public institutions. Recommended trade contact. Reply to—Goran Nygren, Mng. Dir., Firma Cany, Box 117, S-640 31 Mellosa; Telex. 54028 CANY S; Tel. 0157/603 20.

Communications equipment

3662500 — SWEDEN — Instruments to detect communications & other electrical wires & cables located at bottom of sea. Small firm (4 employees) with good reputation. Owner & manager, Evo Larsson, financially sound. According to local credit sources, payments have been met satisfactorily. Recommended trade contact. Since firm recently estab., however, normal business precautions recommended. Reply to—Evo Larsson, Evobi Import AB, Sekreterarbacken 16, S-122 36 Enskede. Cable. EVOBIMPORT STOCKHOLM; Tel. 08/39 22 40.

Special product groups

9950—UNITED KINGDOM — Do-it-yourself items. Erwin Eltes starting own business, having sold out of previous business he built up to successful public co. Experienced in importing, exporting worldwide, particularly in DIY & tech. products. Interested in acting as agent or importer/distrib.; & future mfr. under license. DIY sectors of interest include flooring, heat conservation; construction & wall cladding; furnishing or decorative products. Reply to—Erwin Eltes, White Briars, 33 Esher Place Ave., Esher, Surrey, KT 10 8PU. Tel. Esher 64979. Ref. Wm. & Glyn's Bank Ltd., 67 Lombard St., London EC3.

Future Construction Abroad

GUATEMALA — Ministry of Communications & Public Works, through Highway Bureau, has announced **road construction program** consisting of approx. 180 kms of roads. To be subdivided into three subprograms, A, B, & C, as follows: Sub-Program A: improvement of major roads with total of approx. 39.4 kms: I) San Lucas-Antigua, 13.4 kms; II) San Lucas-Chimaltenango, 26.0 kms. Sub-Program B: reconstruction of feeder roads with total of approx. 115 kms: I) Selegua-Nenton, 27 kms; II) Godinez-CA 1, 21 kms; III) Malacatan-San Rafael Pie De La Cuesta-El Tumbador, 41 kms; IV) San Marcos-San Rafael Pie De La Cuesta, 26 kms. Sub-Program C: construction of rural roads with total of approx. 25 kms. as follows: I) San Martin Barcenas, 12 kms. Job includes terracing, drainage and paving. Projects B (III) & B (IV) also include traffic signs as well as metal fences. In addition, 6 culverts and 5 bridges must be constructed for project B (III). All work must be carried out by duly organized and legally constituted national independent or associated construction firms or by firms from eligible member countries of Inter-American Development Bank through contracts won by international public bidding. All firms must be inscribed in prequalification register of Guatemala Highway Bureau and should note: construction firms already prequalified must only present updating documents to revalidate prequalification, during period which ends 20 working days prior to opening of bids for each project. Firms not inscribed must obtain information as well as instructions and respective forms at Secretaria De La Comision Precalificadora, Departamento De Especificaciones De La Comission Tecnica De La Direccion General De Caminos, Salon No. 7, Finca Nacional "La Aurora," Zone 13, Guatemala City. All documents must be presented in Spanish or accompanied by translation by certified translator authorized by Government of Guatemala. Project partially financed by IDB. Prequalification deadline Aug. 23.

EGYPT—Bidders sought for supply of one complete horizontal rotary oil-fired **kiln** with capacity 240 tons per day of calcium oxide (100 percent basis) for providing carbon dioxide and lime for soda ash plant of Misr Chemical Industries. Interested U.S. firms contact agents in Egypt for conditions and specs of this tender, which may be obtained from address below for 100 pounds sterling. Provisional guarantee of $100,000 also requested. This tender was previously called to selected firms, now open to international bidders. Bids should be submitted by Sept. 20 to Foreign Purchase Committee. Misr Chemical Industries Co., El-Mex, Alexandria, Egypt, telex: 4119 KIMISR-UN, telephone: 38420. Additional information available from Andras F. Behr, BIC/CAGNE, U.S. Department of Commerce, Washington, D.C. 20230; 202-377-4441.

IRAN—Government-affiliated company, Educational Buildings Industries, Inc. (EBI), is seeking companies capable of carrying out **turnkey package (including training and initial operation) for precast concrete plant to produce wall, floor, roof panel columns and beams** sufficient for 28,000 sq. meters of multi-story school buildings annually. Pre-engineering capability is prerequisite as is familiarity with production machinery. Terms and conditions (e.g., contract or joint venture) are negotiable. Contact Neil MacIndoe, Consultant Architect, Educational Buildings Industries, Inc., Miremad Avenue 12, 7th St., Tehran. Additional information available from Andras F. Behr, BIC/CAGNE, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-4441.

Visiting Buyers & Officials

SINGAPORE—William Yow seeks contact with U.S. manufacturers of all types of **construction equipment** as well as **paving machines, cement mixers, diesel and electric marine engines, generator sets and gear boxes.** For further information contact Theresa E. Rettig, U.S. Department of Commerce, Room 2322, Washington, D.C. 20230; 202-377-3265.

SWEDEN—Bjorn Fransson and Gunnar Klason, Purchasing Manager and Marketing Director, respectively, of AB Perma System, Mullsjo, will visit New York in August to purchase **extruded aluminum shapes,** anodized, width up to 280 mm., for use in sun-shading devices. Needs up to 800 tons per year. Firm manufactures fittings and accessories for awnings, venetian blinds and other sun-shading devices. Bill Corfitzen, 202-377-2068.

AUSTRALIA—Businessman arriving in U.S. mid-August, seeks contact with manufacturers/suppliers of **air compressors.** Desires compressors in range of 5 H.P. for rotary types and portable compressors of both types from 40 to 200 H.P. Pressure for all types to be around 150 P.S.I. Jim Nader, 202-377-3265.

AUSTRALIA—T. T. McComb, Director, Thompson Machine Co., Queensland, will visit United States in August to purchase **automatic stackers for building materials, automatic cartridge stackers for C channels, lipped channels, and box sections.** Stackers must be suitable for handling subject products as they come off production line. Buyer also seeks **air ram presses** powered by air springs/bags, 6 to 100-ton capacity for high-speed punching and shearing. Bill Corfitzen, 202-377-2068.

AUSTRALIA—J. A. Rickard, Chief Exec., CEMAC Associated Ltd., will visit the United States in October to purchase **industrialized building systems** with emphasis on factory-built transportable structures and modular panelized systems. Contact Bill Corfitzen, 202-377-2068.

☆ U.S. Government Printing Office: 1977, 240-851/20

Main Commerce, 14th Street and Constitution Ave., NW., Washington, D.C. 20230, (202) 377-2000

U.S. DEPARTMENT OF COMMERCE

JUANITA M. KREPS, Secretary of Commerce — **SIDNEY HARMAN,** Under Secretary of Commerce

Secretarial Officers

Frank A. Weil, Asst. Secretary for Domestic and International Business

Robert J .Blackwell, Asst. Secretary for Maritime Affairs (Maritime Administration)

Courtenay M. Slater, Chief Economist

Jerry J. Jasinowski, Asst. Secretary for Policy

Elsa A. Porter, Asst. Secretary for Administration

Fabian Chavez, Jr., Asst. Secretary for Tourism (U.S. Travel Service)

Anne Wexler, Deputy Under Secretary for Regional Affairs

Charles L. Haslam, General Counsel

Jordan J. Baruch, Asst. Secretary for Science and Technology

Robert T. Hall, Asst. Secretary for Economic Development

Heads of Operating Units

Robert M. White, National Oceanic and Atmospheric Administration

Manuel D. Plotkin, Bureau of the Census

John M. Richardson, Office of Telecommunications

Howard D. Tipton, National Fire Prevention and Control Administration

George Jaszi, Bureau of Economic Analysis

John P. Kearney, Office of the Ombudsman

William T. Knox, National Technical Information Service

C. Marshall Dann, Patent and Trademark Office

Ernest Ambler, Acting, National Bureau of Standards

Allan A. Stephenson, Acting, Minority Business Enterprise

Regional Secretarial Representatives

Frederick A. Schenck, New York City—(212) 264-5647

Frederick A. Ricci, Philadelphia—(215) 597-7527

Paul Hemmann, Atlanta—(404) 881-3165

Helen M. Keyes, Boston—(617) 223-0695

Dr. Allen Haile, San Francisco—(415) 556-5145

Dr. Gayle P. W. Jackson, Kansas City—(816) 374-3961

Stephen McNichols, Denver—(303) 327-4285

Edward L. Coker, Dallas—(214) 749-2891

Leonard Saari, Seattle—(206) 442-5780

Loren A. Wittner, Chicago—(312) 353-0340

District Offices

Albuquerque, N.M., 87102, 505 Marquette NW, Suite 1015 (505) 766-2386.

Anchorage, 99501, 632 Sixth Ave., Hill Bldg., Suite 412 (907) 265-5307.

Atlanta, 30309, Suite 600, 1365 Peachtree St., N.E. (404) 881-7000.

Baltimore, 21202, 415 U.S. Customhouse, Gay and Lombard Sts. (301) 962-3560.

Birmingham, Ala., 35205, Suite 200-201,908 S. 20th St. (205) 254-1331.

Boston, 02116, 10th Floor, 441 Stuart St. (617) 223-2312.

Buffalo, N.Y., 14202, Room 1312, Federal Bldg., 111 W. Huron St. (716) 842-3208.

Charleston, W.Va., 25301, 3000 New Federal Office Bldg., 500 Quarrier St. (304) 343-6181, Ext. 375.

Cheyenne, Wyo., 82001, 6022 O'Mahoney Federal Center, 2120 Capitol Ave (307) 778-2220, Ext. 2151.

Chicago, 60603, Room 1406, Mid-Continental Plaza Bldg., 55 E. Monroe St. (312) 353-4450.

Cincinnati, 45202, 10504 Federal Office Bldg., 550 Main St. (513) 684-2944.

Cleveland, 44114, Room 600, 666 Euclid Ave. (216) 522-4750.

Columbia, S.C., 29204, Forest Center, 2611 Forest Dr. (803) 765-5345.

Dallas, 75242, Room 7A5, 1100 Commerce St. (214) 749-1515.

Denver, 80202, Room 165, New Custom House, 19th and Stout Sts. (303) 837-3246.

Des Moines, Iowa, 50309, 609 Federal Bldg., 210 Walnut St. (515) 284-4222.

Detroit, 48226, 445 Federal Bldg., 231 W. Lafayette (313) 226-3650.

Greensboro, N.C., 27402, 203 Federal Bldg., W. Market St., P.O. Box 1950. (919) 378-5345.

Hartford, Conn., 06103, Room 610-B, Federal Office Bldg., 450 Main St. (203) 244-3530.

Honolulu, 96850, 4106 Federal Bldg., 300 Ala Moana Blvd., P.O. Box 50026 (808) 546-8694.

Houston, 77002, 2625 Federal Bldg., 515 Rusk Ave. (713) 226-4231.

Indianapolis, 46204, 357 U.S. Courthouse & Federal Office Bldg., 46 E. Ohio St. (317) 269-6214.

Los Angeles, 90049, Room 800, 11777 San Vicente Blvd. (213) 824-7591.

Memphis, 38103, Room 710, 147 Jefferson Ave. (901) 521-3213.

Miami, 33130, Rm. 821, City National Bank Bldg., 25 W. Flagler St. (305) 350-5267.

Milwaukee, 53202, 605 Federal Office Bldg., 517 E. Wisconsin Ave. (414) 291-3473.

Minneapolis, 55401, 218 Federal Bldg., 110 S. Fourth St. (612) 725-2133.

New Orleans, 70130, Room 432, International Trade Mart, 2 Canal St. (504) 589-6546.

New York, 10007, 37th Floor, Federal Office Bldg., 26 Federal Plaza, Foley Sq. (212) 264-0634.

Newark, N.J., 07102, Gateway Bldg. (4th floor) Market St. & Penn Plaza (201) 645-6214.

Omaha, Neb., 68102, 1815 Capitol Ave., Suite 703A (402) 221-3665.

Philadelphia, 19106, 9448 Federal Bldg., 600 Arch St. (215) 597-2850.

Phoenix, Ariz., 85073, 2950 Valley Bank Center, 201 N. Central Ave. (602) 261-3285.

Pittsburgh, 15222, 2002 Federal Bldg., 1000 Liberty Ave. (412) 644-2850.

Portland, Ore., 97204, Room 618, 1220 S.W. Third Ave. (503) 221-3001.

Reno, Nev., 89509, 2028 Federal Bldg., 300 Booth St. (702) 784-5203.

Richmond, Va., 23240, 8010 Federal Bldg., 400 N. 8th St. (804) 782-2246.

St. Louis, 63105, 120 S. Central Ave. (314) 425-3302.

Salt Lake City, 84138, 1203 Federal Bldg., 125 S. State St. (801) 524-5116.

San Francisco, 94102, Federal Bldg., Box 36013, 450 Golden Gate Ave., (415) 556-5860.

San Juan, P.R., 00918, Room 659, Federal Bldg., Chardon Ave. (809) 753-4555.

Savannah, 31402, 235 U.S. Courthouse and Post Office Bldg., 125-29 Bull St. (912) 232-4321, Ext. 204.

Seattle, 98109, 706 Lake Union Bldg., 1700 Westlake Ave. North (206) 442-5615.

U.S. GOVERNMENT PRINTING OFFICE
ASSISTANT PUBLIC PRINTER
(SUPERINTENDENT OF DOCUMENTS)
WASHINGTON, D.C. 20402

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, $300

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
201

Controlled
Circulation

U.S.MAIL

To save energy and save our subscribers dollars these inflationary days - - -

COMMERCE AMERICA

Commerce America is now printed on more energy-efficient paper stock and we are cutting our mailing costs in order to reduce the subscription price from $29.80 to $22 per year.

Subscribe to *Commerce America* and discover what the U.S. Department of Commerce can do to help your business.

This biweekly magazine of the Secretary of Commerce reports on events, programs and policies directly affecting the nation's commerce and industry. Commerce Department experts present their views on the economy, domestic and international business, energy management, maritime affairs, science and technology, and the needs of the consumer, to name a few.

Take advantage of this cost saving and send your check or money order for $22 with the completed coupon below to the Superintendent of Documents, U.S. Government Printing Office, for a one-year subscription to *Commerce America*.

SUBSCRIPTION ORDER FORM

ENTER MY SUBSCRIPTION TO *Commerce America*
at $22.00. Add $6.00 for foreign mailing. No additional postage is required for mailing within the United States and its possessions.

Send Subscription to:

NAME—FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

PLEASE PRINT

☐ Remittance Enclosed
(Make checks payable to Superintendent of Documents)

☐ Charge to my Deposit Account No._____

MAIL ORDER FORM TO:
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402